THE

WESTERN JOURNAL

OF THE

MEDICAL & PHYSICAL SCIENCES.

OCTOBER, NOVEMBER, & DECEMBER, 1829.

ESSAYS AND CASES.

ART. I.—*Practical Essays on Medical Education and the Medical Profession, in the United States.*—BY THE EDITOR.

ESSAY II.

PRIVATE PUPILAGE.

It is impossible to approach this subject without emotion. I know of no other, the free discussion of which would be so likely to agitate the profession in America. That I shall treat it without prepossession, prejudice or passion, is not probable; nor is it certain, that I shall say all which should be said; but intending to write with courage and condour, I may hope to awaken, if not to guide, the spirit of reform.

To come at once, to a full understanding with the reader, I shall assume the general proposition, that *our system of private tuition is essentially bad.* But, in truth, we have *no system;* and it would be more correct to say, that in the United States *a good system of private pupilage is imperiously required.*

In the preceding essay, on the preparatory education of students, I have endeavored to show, that its errors and imperfections are permanently stamped on our *literary* character. If this be the fact, we can scarcely doubt, that a defective elementary education, in medicine, must greatly retard our

advancement to *professional* excellence; and whatever does this, demands the gravest attention.

The ordinary time of private instruction is so short, as to require that it should be well employed. If the rudiments of the profession are not *then* acquired, they are seldom properly understood. It is not easy, afterwards, to supply the omission, or correct the errors of that period. I have never known it done. Every stage of life has its peculiar tastes and appropriate studies. In youth we acquire elementary truths —in manhood arrange them into general principles—in the meridian of life, apply them to the production of practical results. Such is the law of nature; and was it inscribed on the doors of every medical library, they would not be so often opened to no beneficial effect.

Having spoken at large of the selection of pupils, I come now to the choice of preceptors. This is a point of more importance than most parents suppose. Many of them, indeed, seem to act on this important subject with but little discrimination. The circumspection with which they select masters, when about to apprentice their sons to mechanical occupations, is seldom manifested when a medical education is the object. They appear indeed to feel themselves incompetent to judge, in the latter case, and, generally, consult economy or convenience; although in so doing, they not unfrequently determine for their sons, a far more imperfect and limited destiny than they intend.

1. It is not *necessary* that the preceptor should be a man of genius; but it is indispensable that he should possess a sound and discriminating judgment, otherwise he will be a blind guide. Of his qualifications in this respect, every parent with opportunities of personal intercourse, may form a correct opinion. It is not requisite, that he himself should be acquainted with the principles of the profession to judge of the talents and common sense of its practitioners: The most unlearned can distinguish between a clouded and an unclouded intellect.

2. A preceptor should be learned, at least in his profession. If a father wishes to make his son a skilful mechanic, he places

him with a good workman—not a botch. How can a man direct the studies of a youth through the elements of several different sciences, if his own acquaintance with them is imperfect and confused? As well might architecture be taught by one, who ignorantly combined in the same column, the parts and proportions which belong to all the different orders. To judge of the *attainments* of professional men, is a more difficult task, than to estimate their *abilities;* but although a father may not be able to do this by direct inquiries, he still has much in his power in this respect. The previous opportunities of the individual whom he scrutinizes, taken in connexion with his existing habits, will generally enable him to come to a correct conclusion. If the former have been limited and the latter are idle, he may safely conclude, that the requisite attainments are wanting; and look elsewhere for the aid which is indispensable to a rapid and logical prosecution of studies.

3. It is not sufficient that a private preceptor has talents and learning. He must be devoted to his profession, jealous of its character, and ambitious of its honours. With such feelings, he will awaken high aspirations in the bosom of the youth whose destiny is committed to his keeping, enamour him with the sciences whose rudiments he is to acquire, and animate him in the toil which their difficulties impose.

4. The preceptor should be conscientious in the performance of his duties; that is, he should feel the responsibilities of his office, and studiously endeavour to discharge them. It is easy to deceive a father in regard to the progress of a son, in the study of a profession with which the former is unacquainted, for all his partialities coincide with the flattering report of the master, and cause them to be received with credulity. In this way many a tutor has repressed paternal anxiety, and screened, from paternal vigilance, his inattention and neglect; inspiring high hopes, at the very moment when his own criminal derelictions of duty were sowing the seeds of their future destruction.

5. The private preceptor should, if possible, be a man of business:—Punctual to his pecuniary engagements, accurate

in his accounts, and systematic in all his affairs. He will thus be an example for the imitation of his pupils, on points in which too many students of medicine grow up with deplorable and enduring imperfections.

6. Finally, sound morals and chastened habits are not among the least of those qualifications, which an anxious father would require in the man, whose deportment and precepts are to exert so great an influence on the character of his son. It would be superfluous to enumerate all the vices, which ought to disqualify a physician for the private tuition of boys and young men; but there are a few which from their frequency and effect, deserve, on every suitable occasion, to be held up to the scorn of society. A want of attention to professional promises, with a consequent fabrication of excuses and apologies, is a failure which no preceptor can habitually display, with impunity to the morals of his pupil; and ought to be regarded as a disqualification, with whatever genius and learning it might happen to be associated. Gambling is another vice, the morbid influence of which on the plastic and imitative pupil, should be still more seriously deprecated; since in addition to the corruption which it carries into the youthful heart, it diverts from study, generates neglect of business, and leads to the loss of character and fortune. Lastly, intemperance not less than gaming, should displace a physician from the ranks of those whom we entrust with the tuition of young men. Intemperance, in the United States at least, has been regarded as a prevailing vice of the profession, and it has too often happened, that boys almost from necessity have been apprenticed to drunken doctors. I am proud to say, that this necessity is rapidly diminishing. Nevertheless, the number of intemperate physicians is still so great, that parents should proceed with care and caution in the choice of preceptors. One of the greatest calamities they could inflict on a son, would be to place him under the guardianship of a drunkard: if unsusceptible of being corrupted by example, he would suffer numerous embarrassments and mortifications—if susceptible, he must be ruined.

It would not be easy to estimate the injury which has resulted to individuals, to the profession, and to society at large, from a want of discrimination in parents, when about to place their sons to the study of medicine. Many a youth has, in this manner, been sacrificed by an ignorant or thoughtless father. Irresolution has sunk into moral cowardice, dullness declined into stupidity, and genius substituted its flights and phantasies for patient analysis; ambition has found its goal in the acquisition of premature and badly earned certificates and diplomas; idleness relieved itself by ceaseless changes from frivolity to frivolity; and the love of pleasure been left to luxuriate into licentiousness and vice. It is playing at cross purposes, for a father to dispense with the services of his son and incur the expense of his professional education; and, at the same time, to place him under an unqualified or unprincipled master. It is due to themselves and their children, that parents should consider this subject seriously. It is, also, due to the profession and the community, that they discriminate on this point. When they confide their sons to the ignorant, the indolent, or the vicious, they encourage that, which every member of the commonwealth is bound to discountenance; and withhold from the learned and meritorious members of the profession, one of the legitimate rewards of their industry, zeal and perseverance. Could no physician hope to attain the distinction of being a preceptor, without first establishing a character for sound science and good morals, not a few who are now reckless of both, would be held firmly to their acquisition.

Another mistake which requires correction, relates to the time of life when medical studies are commenced. Essentially latitudinarian, the American people allow themselves in this respect, as in many others, a singular degree of liberty. Many boys are put to the study of physic at fifteen, while men of twenty five or upwards, who have been too indolent or too unskilful to succeed in their first pursuits, are every day seen to betake themselves to this most difficult and elevated vocation without a single misgiving. Examples of success might be cited in support of both periods, but still they are extremes. When a boy begins the study at fifteen or six-

teen, he generally sets up for himself at nineteen or twenty; a time of life when he lacks *judgment*, whatever may be his acuteness of parts or the extent of his information. On the other hand, he who takes his first lessons after his mind has attained maturity, will seldom move with ease in the practical duties of the profession, even if his life have been spent in studies up to that period; and, if this should not have been the case, which in America is the general fact, the chances are altogether against his ever becoming useful or acquiring public confidence. Seventeen or eighteen, seems to me the most proper age to commence the study. By that time, a due preparatory education may be acquired; the mind and *hands* are still so plastic, as to be directed in their operations; the reasoning faculties are sufficiently developed to investigate the principles of the profession; and the period between that and twenty one or twenty two, is about long enough to admit of the necessary acquisitions.

The youth of the United States, are not only put to the study of medicine at improper ages, but the period of their studies is too short. Nothing is more common than for them to enter on the practice, at the end of two years, or even eighteen months, and three years are thought to be a protracted and tiresome pupilage. But I do not hesitate to assert, that even that term is too short; and that four years should be considered as indispensable. Of the various causes, which have retarded the advancement of the profession in this country, and inflicted upon it such multitudes of medical practitioners who leave behind them no single monument of skill or science, this is one of the most operative and universal.—The blame rests, in part, on our *national* impatience to engage in practical exertions, but still more on the custom which prevails among fathers who are indigent or but little above that condition, of devoting their sons to the profession. The term of their pupilage, is thus determined, not by the sciences which they ought to study, but their means of support.

The situation and circumstances in which a pupil should prosecute his studies, deserve to be considered. In the country and all the smaller towns of the United States, the fashion is

for the student to reside and study in the *shop* or office of his preceptor, and often to become a member of his family.—The latter has its advantages, as contributing to preserve him from dissipation; but his time is too often wasted in labours foreign to his studies, and he is apt to be introduced more frequently into company, than is compatible with his interests as a student. Of the *office*, as a place for study, "much might be said on both sides." It is the resort of many persons besides those who call for medical assistance, and the student is subjected to perpetual, if not protracted interruptions. In this way he loses many precious hours, which can never be reclaimed. At first, the effect of these interruptions is so distracting, as materially to impede his progress; but their influence diminishes with the repetition, until at last he comes to form habits that are not without their value in after life. To understand this, we need only recollect, that the practice of his profession will subject him to incessant interruptions of a similar kind; and if he has not early acquired the art of reading in the midst of them, he will not read at all. From the want of this habit, many physicians pass their lives incapable, as they conceive, from the vexations of business, of reading as many volumes, as they should study every year. Another compensating benefit, is the practical facility which they acquire, from witnessing and assisting in the various little clinical and surgical operations of which a Doctor's shop is the theatre. This however, is not without its disadvantages, as the student is liable to have his mind bent upon practical matters, long before he is able to comprehend their *rationale;* by which his attention is diverted from elementary studies, and a foundation laid for future empyricism. Of the different modes of generating quacks, this is the most prolific; and, as they bear the external marks of legitimacy, the most pernicious to society. Every student, however, should spend a part of his pupilage among the *officinal* substances, that are the agents with which future objects are to be accomplished. He should learn their sensible qualities by observation, and become familiar with all the compounds and pharmaceutic processes of the shop. But to acquire this knowledge, it is

only necessary that he should be in the office, or in the shop of an apothecary, while prosecuting the study of chemistry and pharmacy. When engaged in anatomy, physiology, pathology and botany, the dissecting room, his chamber and the fields, are his appropriate situations. After having, however, acquired a competent knowledge of those branches, with the principles of surgery and the classification of diseases, he may and should return to the scenes of practical medicine; for he is then prepared to comprehend the nature of what he sees, and, to a certain extent, can engage understandingly in the duties of the profession. If, at this period, he be kept in retirement, indecision of character may be generated, and his future usefulness materially abridged.

The portion of each day, which pupils in medicine may devote to their studies, consistently with good health and the future welfare of their constitutions, must necessarily vary in different persons; but a safe average would be one half, or twelve hours. This would give seven for sleep—and few young persons can do with less—two for meals, and three for exercise, labour and society. The last of these divisions is abridged by some and lengthened by others; but in general is profitless to all. With most pupils, the hours of relaxation from study, are hours of idleness, pleasure and gossip: Too often of downright listlessness, or ruinous dissipation. But whether whiled or rioted away, they bring no renovation either of mind or body. To answer the end for which they are set apart, they must be spent in active exertion in the open air; which will not only prepare the mind for new labours, but ward off dyspepsia, palpitations, hypochondraism, and red eyes; and prevent that debility of frame, so falsely regarded as the necessary effect of hard study, when it results from the want of a sufficient amount of hard labour.

Is it necessary or advisable, that the student of medicine should prosecute his studies on Sunday? In answering this question, I shall of course speak not as a divine, but a physician and teacher. I would say, then, that it is not, but the reverse. As a general rule, his progress will be greater, if he suspend, than continue his studies through the sabbath. The

mind, no less than the body, requires not mere moments of relaxation, but hours of actual repose, at least from the particular labours in which it is engaged. Moreover, the student comes into his medical pupilage, with established habits in this respect, which cannot be violated with impunity.—Finally, the moral and devotional feelings require cultivation, and this can best be done by the recurrence, at stated times, of a day for that special object. On the whole, therefore, I regard those preceptors, who encourage their pupils in the prosecution of medical studies on the sabbath, as committing an error in their plan of professional education.

Closely connected with this subject, is another of deep interest to parents as well as pupils. Few things exert a greater influence on our prosperity, than a systematic attention to pecuniary accounts, and the observance of a judicious economy in our expenditures; all of which must be practised in youth, to become matters of habit in manhood. When a father sends his son from home to study the profession, he should decide upon the style of living (always simple and unostentatious) in which the young man is to pass his apprenticeship; and, furnishing him, from time to time, with the necessary means, should require of him to render at stated periods an account of their appropriation. This would compel him not only to limit his expenditures to his resources, but give him at an early period, a habit of recording his disbursements and keeping his accounts, that would be of great advantage in all after years. I have known many physicians, who were neither accurate accountants nor good economists, chiefly because they had grown up in the habitual neglect of the duties which I have indicated.

Other studies than medicine, should occupy a portion of the students time. In the preceding essay, I have said, that a majority of our students of medicine, particularly those of the West, enter upon their pupilage with a most incompetent education. For all such there is no alternative, but to cultivate the elements of literature and science during their medical pupilage, or to remain superficial scholars throughout their lives. I regret to say, that the majority choose the lat-

ter. But are those who have enjoyed the advantages of a collegiate education, exempted from the necessity which rests upon their less favoured brethren? It is obvious that they are not. Few minds are so retentive as to keep what they have acquired at school, if they do not add to it, by a subsequent cultivation of the same branches. To secure this important object, it is absolutely necessary, that the student should devote to it a stated portion of every day—for example the morning or evening; and suffer no controllable circumstance to interfere with his plan. A small part of his time thus occupied, will in the course of four or five years make him a passable scholar, should his learning have been even at the *minimum;* but when he has the happiness to engage in professional studies with the attainments of a *bachelor*, he may by the course here recommended, so far extend his literary acquirements, as to enter on the theatre of life with an enviable character for sound erudition.

It ought to be mortifying to our national pride, to observe how few of those who might thus become ripe scholars ever attain to that elevation. Even many of our writers, except by the latin mottos and quotations with which they seek to adorn their writings, would not be suspected of having pretensions to a liberal education; while to the majority of their professional readers, the whole garniture of classical common places, is occult and unintelligible.

The practical branches of literature and science, on which the student of medicine should devote a portion of his time are:—

First, English grammar and the art of composition; without an attention to which, *after* the commencement of his medical studies, no young man need hope to become even a tolerable writer.

Secondly, Physical geography, embracing the leading facts in meteorology, which constitutes a foundation for the study of the physical condition and diseases of man, in the various countries and climates of the earth; a comprehensive view which should be taken by every physician.

Thirdly, The outlines of history; that he may be able to trace the progress of the profession through the different nations which have transmitted it to his own; and come to understand the influence of moral causes upon the physical system, whose aberrations he is to rectify.

Fourthly, The elements of mathematicks and natural philosophy; not merely for the purpose of invigorating his reasoning powers, but because the latter has many points of illustrative association with medicine.

Fifthly, The French language; since the subjects of morbid anatomy, physiology and pathology, have been recently cultivated with extraordinary success by the French physicians; but a small part of whose voluminous and classical writings, are translated into our vernacular tongue. To avail himself of this source of improvement, it is not necessary that the student should conquer the difficulties of the French pronunciation. A few elementary books, with or without a teacher, are all that are requisite to open to him the rich treasures of medical knowledge, which that enterprising people have accumulated.

Sixthly, The Latin and Greek languages. Of all the branches of literature which have been named, it is, perhaps, most necessary, for those who would retain or establish the character of good scholars, to continue the study of these languages, through the period of their medical pupilage.—Their daily readings will extend their acquaintance with our own language; but without a special effort their classical knowledge will speedily depart from them. But few students are apprized of this fact, until they learn it from experience; when the discovery in general comes too late to be useful; for that which is lost by indolence is seldom reclaimed by industry. A few minutes of daily attention to Greek and Latin, would not only prevent deterioration, but ensure actual advancement; while a longer, but not objectionable period, would bring an uneducated pupil, to such an acquaintance with the grammar and vocabulary of those languages, as would prove in the end quite equal, to all that is generally left at forty, of the classical acquisitions of twenty.

Having disposed of the chief preliminary topics, we are prepared for inquiries of greater technicality and moment; and shall next consider the plan on which the pupil should be conducted through his professional studies. 'Method,' says Linnæus, 'is the soul of science,' an apothegm to which most private preceptors in this country seem to be strangers. With their own professional knowledge unarranged, but provided with a small assortment of medicines, a meagre collection of books, chiefly, practical compilation and compends, a few surgical instruments, and the fragments of a skeleton, they set up for preceptors; as unconscious of their incapacity, as they are ignorant of the defects in their means of instruction.—Their case, however, is far from hopeless, for in fact they win the confidence of the publick by the palpable honesty, with which they set forth their pretensions to its patronage. A student once acquired, he is turned loose in the *shop*, and, left to cater for himself, at once becomes a real *eclectic*. Generally, however, he begins with descriptive anatomy; which, proving a *dry* pursuit, he abandons in due season, and seldom fails to hit upon materia medica, from which he proceeds to the practice of physic, obstetrics and surgery. He is now on elevated ground, and looks down on chemistry, pharmacy, botany, general anatomy, physiology and pathology, as matters well enough in their place, but lying so far below, that he cannot descend to them without disgrace. This occupies the first year; when being *qualified* to 'practise,' or at least for 'seeing practice,' his mind turns upon recepies; and he spends the second year, in collecting and cramming his master's patients with 'infallible cures.' After this, according to his pecuniary means, he either attends lectures, or 'opens shop' for himself. For the first half of this *course of studies*, the preceptor generally does not think it worth while to interfere; but the second passes under his watchful eye, and he is thus enabled to certify, that his *eleve* is amply prepared for the duties of the profession, and promises fair to become an ornament of the profession!

In medicine, as the other sciences, that method is best, which requires the student to take nothing on trust—to anti-

cipate no principle or leading fact. The whole course should, as far as possible, be purely synthetical.

In conformity with this opinion, he ought to begin with CHEMISTRY; provided that science had not made a part of his academical or collegiate studies. It is necessary, however, that he should go extensively or minutely into the practical details of this science; as the subject is to prepare him for a proper understanding of the chemical terms, with which he will meet in the study of physiology.

Relinquishing chemistry he should engage in special ANATOMY, which may be studied in the following order;—1—the bones, 2—the muscles, 3—the viscera, 4—the blood and absorbent vessels, 5—the brain and nerves. He is now prepared for general anatomy, and should make himself familiar with the anatomical relations and dependencies of the various organs.

He will thus qualify himself for the study of PHYSIOLOGY, the foundations of which are anatomy and chemistry; and his progress, in that important branch of the profession, will, *cæteris paribus*, be in proportion to the accuracy of his anatomical and chemical knowledge.

From physiology he may either recur to the studies of which chemistry is the basis; or, according to his taste or the judgment of his teacher, proceed by a natural transition to acquire an outline of PATHOLOGY. The latter is perhaps, on the whole, the better course; for when the mind of a pupil is deeply interested in the contemplation of the healthy functions, it passes with facility to the study of their disordered states; and thus, with little difficulty, comes to comprehend the general principles of pathology: But he should, on no account, be permitted to stray beyond the rudiments of the science of diseased actions. And here I will take occasion to remark, that I know of no distinct treatise on the elements of pathology which is adapted to this stage of a pupil's studies; and, hence, it is necessary, that a selection should be made, by the preceptor, of such parts of various works on the theory and practice of medicine and surgery, as will convey a correct general idea of the existing state of pathological science.

Having gone thus far in the study of the animal economy, in its healthy and morbid conditions, he must stop. In going further, he would instantly reach matters which he could not understand, for want of an acquaintance with branches which I shall now proceed to enumerate.

The first of these is Botany. It requires but little observation to perceive, that the science of the vegetable kingdom has many important relations with medicine. Plants and animals offer numerous anologies, in their structure, and the physiology of one, contributes to enlighten us, in reference to the other. But the connexions of botony with materia medica, are still more intimate than with physiology, and cannot be overlooked by the most unobserving; and yet the majority of physicians are as ignorant of that beautiful science, as of algebra or astronomy. It is by no means necessary, that a physician should be a *practical* botanist; but it argues little for the taste or ambition of a student of medicine, that he is content to remain ignorant of the fundamental laws of any department of organized nature. The fashionable excuse for making a *pons asinorum* of the science of botany, is the extent and difficulty of its nomenclature. But admitting, that in this respect, it even transcends anatomy, while its utility is comparatively limited; I can perceive nothing in the case which should frighten a young man of courage and inquisitiveness, from the undertaking. If his knowledge of the Greek and latin languages is considerable, the technicology of botany, can present no obstacles which a little resolute industry will not remove; and if he is nearly ignorant of those languages, the condition of most medical students, the study of botanical terms, will materially improve his knowledge of their vocabularies. In botany, more than most other sciences, that which is repulsive lies at the entrance. It might be likened to a garden hedged in with thorns and thistles: the tangled enclosure once penetrated, a rich possession of flowers and fruit is the reward. In addition to its utility, as a collateral aid to physiology, and an introduction to materia medica, there is another advantage in the study of botany, which deserves to be set forth. Plants are arranged by their external charac-

ters; among which there are innumerable affinities that cannot be seen and contemplated, without imparting acuteness to the faculties of observation, and establishing a habit of natural classification which is beneficial throughout life. In these respects, I know of no science that can be compared with botany.

Having added to his outline of chemistry, a competent knowledge of the first principles of botany, the student approaches the composite science of MATERIA MEDICA, with conscious preparation, and the confidence necessary to success. It is the duty of his teacher to acquaint him with the important fact, that the natural and pharmaceutic history of medicines, is totally distinct from the study of their effects upon the living body, either in health or disease, and should first engage his attention. This, however, is seldom done, and the student is allowed to fix his mind upon the latter, before he has made acquaintance with the former;—an inversion in the order of study, which lays the foundation of many future imperfections. He should, therefore, be held rigorously to the natural history, composition, and preparations, of the different medicines; until he becomes familiar with the whole. He may then proceed to examine into their effects, on the animal system; and here, again, he will be in danger of inverting the order of inquiry. Most students are prone to connect the names of particular medicines with particular diseases, by which they lose the disposition to generalize, and establish wrong associations that often continue throughout life. The first object should be to arrange the articles of the materia medica, according to their effects, not in the cure of diseases, but on the different functions; and beyond this important and difficult task, the pupil at this stage of his studies should never be allowed to proceed; as the very next step would be taken in the dark. It is necessary, therefore, that he should again change his course, and direct his inquiries upon other objects which I shall now proceed to consider.

I will not say, that in returning to the study of diseases, the pupil should review his anatomy, for in fact this fundamental branch of the profession, should not have been neglected in

any period of his course, as no kind of knowledge is so difficult to retain. Hence he should, as far as practicable, associate it with all his other knowledge, a measure that will contribute greatly to its retention and usefulness. He should, however, review his physiology; not by re-perusing the authors already gone over, but some treatise or compilation which he had not before read, and which presenting new facts and speculations, or old ones in a new aspect, may clear up his doubts and fix his principles. This being accomplished, he resumes the study of pathology with acquirements that will enable him to discuss the theories of physic and SURGERY to their utmost limits. These theories he is not to regard as separable into distinct sciences, for they are in fact one and indivisible. Their primary elements are the same. Every physician need not be an *operative* surgeon, but every good surgeon must be likewise a physician. The mere operator, if any such there be, is but a mechanic. The amputation of a limb is a mechanical process; but the treatment which might have been employed to subdue inflammation and ward off the gangrene that rendered the operation necessary, could only be guided by the principles of clinical medicine. Take another example. The extraction of the calculus is effected by the use of instruments, moved according to certain *formulæ;* but the diathesis which generates the stone, is among the most occult and complicated subjects which can tax the genius of the physiological pathologist, or animate his clinical efforts. The *desideratum* is, in fact, a method of treatment that will render a resort to the cruel and hazardous operation of lithotomy unnecessary. The surgery of this case, then, as of most others, grows out of the imperfection and constitutes the opprobrium, of its therapeuticks; and the man who might limit himself to the former, would justly be regarded as an empyrick. Again. The whole subject of inflammation, belongs equally to medicine and surgery, and may be studied without a special reference to either, while they contribute alike to the illustration of its origin, progress and termination.

Whatever, then, may be the ultimate aims of different pupils, their pathological studies should be the same. They must seek to acquire distinct and vivid conceptions of the morbid states which are supposed to be indicated by the terms congestion, irritation, inflammation, fever, nervous irritation, morbid sensibility, sympathy, spasm, morbid secretion, metastasis, vicarious action, collapse, torpor, debility, exhaustion, proximate cause, organic læsion, vis medicatrix, obstruction, local determination, malignity, and many others of subordinate moment, which constitute the elements of pathology, whether clinical or surgical. When they have grappled for a sufficient time, with the difficulties which every attempt to learn the true import of these common, but equivocal words unavoidably imposes, they may proceed to consider the *varieties* of inflammation, fever, spasm, and the other morbid states, which will bring them to Nosology, or the classification of diseases; when for the first time, they will perceive the paths by which those who intend to limit themselves to clinical medicine, and those who propose to cultivate operative surgery, are to diverge from each other. Having looked into the systems of nosology, with sufficient care to perceive, both their importance and their imperfections, the coadjutors may betake themselves in *some* degree to separate studies:—the student of physick to functional, the student of surgery to organic derangements. The latter are, however, in all cases—mechanical injuries excepted—the offspring, as in turn they become the occasion, of the former; and hence they must both be studied by each class of pupils, though not in an equal degree. In his nosological inquiries, the student becomes acquainted with what the naturalists call *essential characters;* but, arriving at the investigation of particular maladies, whether medical or surgical, he will of course extend and correct his knowledge of Symptomatology; endeavouring by the utmost effort of his understanding to connect each symptoms with the morbid state of which it is the sign. In doing this he will be led to enlarge his knowledge of Morbid Anatomy, the first ideas of which might have been received while engaged on general pathology.

In this stage of his progress, he is qualified to investigate the causes of disease, a subject so enveloped in obscurity, that many students give it but a passing attention. AETIOLOGY is, however, a branch of medical science of sufficient importance to justify, I should rather say, demand an attentive investigation; and the very difficulties with which it is beset, should stimulate a pupil to its deep and protracted examination.—Scarcely any portion of his studies will bring into requisition all his knowledge of nature and art, like that of which I am speaking. Of the origin, combination and mode of action of the *causas morborum*, much remains undeveloped; partly from the intrinsic difficulty of the subject, but still more from the loose and limited manner in which it has been generally studied. With these convictions, I would indicate it to students of medicine, as a department of the profession in which they may labour with a well founded hope, of doing good to society and credit to themselves.

Finally, he arrives, by a regular transition, at the PRACTICE of the profession—its therapeuticks and operations. He studies the indications of cure, and labours to establish in his mind, correct associations between symptoms and remedies—an association not arbitrary and empyrical, but founded on an ample and accurate knowledge of the functions of the living body, in their regular and irregular conditions; and of the influence of external agents in the production and cure of diseases. The popular distinction between physic and surgery now becomes more apparent than before; and I shall proceed to speak of them separately.

The student who intends to limit himself to the practice of physic, must recollect, that even in countries where the line of separation is drawn with an absurd and unnatural precision, the physician is compelled to prescribe for a great number, and variety of cases which belong equally to the province of the surgeon. If this be the case in Europe, it must be much more so in the United States, where out of the large cities, there are no professed surgeons. In fact, all our physicians are surgeons likewise; and differ from the practitioners so called, only in declining the performance of a few

of the greater operations—such as those for hernia, lithotomy, aneurism, deep seated tumours, cataract, and a few others. To the reduction of dislocation and fractures, the management of ulcers, trephining, amputating, dressing wounds, and other duties of a similar kind, which, from their frequency, make up the mass of surgical business, every physician is presumed to be competent. The pupil then, even when engaged in his *practical* studies, is by no means to limit himself to that which is technically called physic; but, extending his inquiries to surgery, stops short of nothing but its higher operations.

Every part of a course of medical studies abounds in difficulties, and calls for intense and sustained application; but no stage is so trying to the powers of the student, as that which may be called the *therapeutick*. Hitherto he has occupied himself, successively, upon distinct sciences, which he perceived to abound in connexions favourable to their union into a system of professional knowledge; and that union, in reference to his own mind, he is now to effect. He is faithfully represented by the commander, who having embodied and equipped a great variety of separate military *corps*, has at length to consolidate them into an army and direct its active operations.

It is difficult to furnish a student with rules for the organization of his various attainments into a practical system, and much must necessarily be left to his own genius and judgment. A few hints, however, may not be without their utility.

1. If he now finds deficiences in any of his preliminary acquirements, he should supply them, without delay, by a recurrence to the branches in which they are discovered to exist.

2. In ascertaining general principles, he should carefully note those which are of a doubtful character, and rest upon them as few rules of practice as possible.

3. His practical maxims, in all cases, should be logical deductions from his principles.

4. If they do not conform to those of the great and original writers of the profession, he should *doubt* their correctness, and act upon them cautiously; but not reject them without a trial.

5. He should recollect that the same diseases, in different countries, frequently require variations in their treatment, and that he must not implicitly adopt the rules of practice that have been found successful elsewhere.

6. When he meets, in practical works, with different modes of treatment for the same disease, he should not suppose that one only can be correct, and the others necessarily erroneous; for diseases may be cured by various methods. In becoming an eclectic, in these cases, he must carefully examine the whole, and test their merits by the great principles of pathology and therapeuticks, which compose his own system. When he attempts to select from among them, he should avoid uniting rules or recipies that are incompatible, and would therefore countervail or neutralize each other.

7. In his practical researches, he should always prefer original works to compilations, and monographs to systems.

8. He must be on his guard against the delusion of a fancied simplicity, in the system which he constructs. Every complex machine is liable to a variety of irregular movements, which can only be reduced to order by a corresponding diversity of means. But of all machines the human body is the most complicated, exhibits the greatest number of disordered actions, all differing from each other, and requires the greatest variety of remedial applications.

9. When arrived at this stage of his studies, he should no longer stand aloof from the practical duties of the profession; but avail himself of frequent opportunities to make an application of his knowledge. This is the end for which he has studied, and his final success will be proportionate to the facility and effect with which he can make such application.—Skill in practice does not arise, however, from the number of cases he may see or treat, so much as the manner in which he contemplates them. Each one should be a study, and all things relating to it, should be connected with the principles that guide him, and which, in turn, they may serve to illustrate or overthrow.

Should the student intend to make Operative Surgery, his principal object, he may observe most of the foregoing sug-

gestions, while he bestows especial attention on the following subjects:—

1. The anatomy of the parts which are the seats of the greater operations of the art. With these parts, particularly such of them as cannot be cut into without danger, he should be perfectly familiar:—Not merely able to enumerate the muscles, and fasciæ, and nerves, and bloodvessels of which they are composed, but to conceive accurately of the relative situation of those anatomical elements. He should, moreover, learn to know each part, not only by the eye, but by the finger; as it will frequently happen, in deep and bloody operations, that the sense of touch is the only one he can employ.

2. He should practise the various operations on the dead subject; for by practice only, can he become adroit, or acquire that confidence which gives self possession in moments of difficulty and doubt. In this stage of his *practical* studies, he will often find it advantageous to supply the deficiency of human subjects, by a resort to dead animals; in the selection of which he will be materially aided by some acquaintance with zoology.

3. He should practise on the living or the dead subject, the application of the various kinds of bandages and apparatus of surgery. For the neat and efficient discharge of this duty, more experience is necessary, than many persons suppose until they come to the trial in cases of real injury, when it is too late to prepare themselves.

I shall conclude this branch of the subject with a reference to OBSTETRICS. This department of the profession is emphatically a compound of physic and surgery, and on this account not less than many others, it should be the last which a pupil studies. The healthy functions of the uterine system however, will have been learned by him, as a portion of physiology. As to obstetrical studies, the most important observation I can make, is, that the young physician will be called to act, with less of *practical* information, than in any other branch of the profession, for in no stage of his pupilage can he have many opportunities of acquiring that kind of knowledge. Hence he should study the subject in books, and by means of

plates and models, with extraordinary care and diligence.—Without doing this, he may be thrown into situations of responsibility, most harrowing to his feelings, if not fatal to his patient.

With these intimations, I shall close what it seems necessary to say, concerning the plan on which a course of medical surgical and obstetrical studies should be conducted; and in conclusion, shall speak of the aid which the pupil should receive from his preceptor.

At the risk of being thought severe, and perhaps tedious, I feel constrained to repeat, as a general fact, that the physicians of the United States, are culpably inattentive to the studies of their pupils; and that this is one of the causes which retard the improvement, and arrest the elevation of the profession. Exceptions to this (apparently invidious) remark, are frequently met with, especially in the great cities; but still they are *only* exceptions. Without presuming to inquire, at large, into the causes of this default, I may mention that which seems to me, the most operative. The price of tuition is too low. The preceptor feels no business obligation, and too often forgets what he owes to society and the profession. Like other men, he gives in proportion as he receives, and when a pupil comes without money, permits him to depart without knowledge. He would thus, by implication, cast the whole blame on the father, but the fault is equally his own. He ought not to take a student, without the design of making him a good practitioner, and when an inadequate fee is proffered by the father, should decline the application. If he does not, but graduates his aid according to the reward, he degrades the profession and is accessory to an imposture on the community. On this subject unfortunately we have no *esprit du corps*, no uniformity, no emulation; while the whole are imperiously required. The conscience which warms and purifies our professional efforts in the sick chamber, is too often dumb in the study, where its promptings are equally demanded. Tuition is an art, but not governed by fixed and universal laws. The student is to be urged onward from the 'known to the unknown' through a variety of complex and difficult sciences. In this proceeding, the mere *ipse dixit* of his preceptor can do but little good; while a well directed superintendance will confer lasting benefits. The kind and manner of assistance must necessarily vary with the idiosyncracies of both master and scholar; for that which facilitates the progress of one pupil, sometimes retards another, who requires a different regimen; and the methods which one preceptor follows with success, are often impracticable for another, from

being inconsistent with his temperament and habits. But in the midst of these diversities of character, to which an excessive importance ought not to be attached, we may perceive, several methods which are applicable to every case, and I shall proceed to enumerate them.

1. The physician who proposes to become an instructor, should provide the requisite books, engravings, preparations and apparatus. He must not rely on his own attainments, as they cannot be transferred to his pupils, but through the instrumentality of established means.

2. He should form a plan of elementary studies and require his pupils to follow it. To this end he must designate every book that is to be read, and debar them from the perusal of any others. It is even necessary, to mark portions which should be passed over, as being incomprehensible without ampler preparation, or as having been proven erroneous. All our systematic works abound in chapters of the latter kind, the study of which cannot be too strongly reprobated, as planting errors in the young mind which may never be eradicated.

3. He should encourage his students to ask him questions and solicit his aid, on the obscure and difficult parts of every author; that nothing may be passed through without being understood.

4. As a further means of effecting the same object, he ought to examine every one on the book he has just finished; and, thus, not only correct his errors, but animate him to close and accurate application.

5. At least once a week he ought to assemble his pupils into a class, and subject them to systematic examinations on the studies in which they are engaged. When such examinations are ably conducted, they constitute the most interesting and valuable exercises in which students ever engage. By a series of well directed questions he may guide them through the labyrinths of the most complicated subject; and enable them to analyze that which they would otherwise find impenetrable and hopeless. Their errors of principle and nomenclature will be corrected; and their confidence in the truth established; their scattered acquirements solidified into a system, its deficiences made manifest, and the mode of supplying them indicated. Thus they will be led to contemplate and comprehend the relations which unite facts, that in badly educated minds remain insulated and in apparent variance. Above all, he can in this way and no other, relieve the *tedium* of solitary reading; invest the study with charms that render it attractive; and inspire an emulation for relative excellence, that will seldom fail to work out positive distinction.

6. He should require each pupil, at least once a month, to write a thesis. This exercise should commence with his studies, and continue till it terminates in his inaugural dissertation. Its advantages are manifold, not the least of which is the pleasure, which, in a short time, it affords to every aspiring and inquisitive student. When studying anatomy, his theses will of course be purely descriptive, a kind of writing in which none can be proficient without practice. As he advances, they may assume a higher and more diversified character. Some of them should be simple abridgements of chapters written with diffuseness, of which, unfortunately, there is no lack; others might be purely analytical; others critical, or in the manner of reviews; and a portion, mere commentaries on authors of a concise and aphoristick cast. In this way, he will form habits of attention, and be led to study with profit, what he would have passed by with carelessness. In the latter periods of study, his essays may take on a still higher character. He may begin to unite facts into regular dissertations, according to the rules of a sound philosophical logic; investigating principles, and constructing the elements of the system which is to guide and govern his future efforts in the practice.

Was the custom of writing enjoined on every pupil, we should not have so many candidates for graduation, incapable of composing their own theses; nor so many good physicians, who are unqualified to lay before the profession the results of their experience. Not a few of them, indeed, from neglecting what is here recommended, find themselves, in after life, unable to write a single sheet of professional directions with simplicity, taste and perspicuity.

7. Lastly. It is the duty of the preceptor, when his pupil is prepared for clinical observations, to select for him such cases as will be profitable. The Diagnosis of diseases presents many difficulties, and can be successfully studied only at the bed side. To introduce a student indiscriminately to all cases, is more likely to confuse than enlighten his mind. He should first study those which present a well defined character, and proceed gradually to the more obscure and complicated. But the most judicious selection of cases, will impart but little instruction, unless they are made the subjects of conversation and comment by the preceptor. In these clinical lectures, the benefit which he confers upon his disciple, if not greater, will be more deeply felt, than in any other period of their connexion. The utility of whathe has been teaching will now be made apparent; and the endearing relation finally dissolved, with feelings of gratitude in one, and self approving consciousness in the other.

ART. II.—*Case of Cartilaginous Structure of the Cervix Uteri in a pregnant woman, requiring an incision through the Os Uteri to render delivery practicable.* By G. COTTON, M. D. of Marietta, President of the Medical Society of Ohio.

I was called to visit Mrs. S—— about twelve miles from Marietta, while in labour with her second child in consultation with Dr. B——. She had then suffered more than forty eight hours with severe pains. On examination, I found the os Uteri about two inches within the os Externum, and dilated to the size of half a dollar; but instead of the soft and yielding appearance usual at such times, I was surprised to find it hard and rigid, and apparently of a cartilaginous structure. The cervix Uteri did not as usual project into the Vagina, but was continous with it. I then understood that she had suffered very greatly in her former labour, and was at length delivered with instruments. Much inflammation followed, which resulted in a sloughing of a portion of the internal parts of the Vagina, and probably a portion of the cervix Uteri; after which, adhesions took place in such manner as to obliterate the projecting neck of the Uterus. Dr. B. informed me that the os Uteri had remained in the present state for at least forty eight hours.

We concluded to try the effect of copious blood letting, which is oftentimes so efficacious in producing a relaxation of the os Uteri, though I expected but little benefit from the operation.

We accordingly took from a large orifice in the arm, about thirty two ounces of blood, which produced considerable faintness, but not the slightest alteration in the state of the os Uteri.

In the mean time, the woman had become much exhausted, indeed she had been, for a long time in feeble heath, and had been supposed to be dropsical.

No hope now remained of effecting a delivery by ordinary means. Under these circumstances we concluded to make an incision through the rigid os Uteri, sufficient to enable us to deliver with the crotchet. Accordingly I made a longitudinal incision of about one and a half or two inches in length

through the cartilaginous structure of the cervix Uteri, selecting that part which seemed most rigid; and by using the Crotchet was enabled to bring down the child which was small and in a half putrid state. No unusual hæmorrhage occurred. The placenta however we could not deliver; and after several ineffectual attempts, the cord having separated from it, and the woman becoming much exhausted, with laborious respiration, and other unfavourable symptoms, we concluded to leave her to repose; thinking that the placenta would probably be ejected by the action of the Uterus, when it should recover from its present exhaustion. The next morning she was much recovered, and in the course of the day the placenta was expelled. This woman afterward recovered without the occurrence of any very unfavourable symptoms.

This case exhibits the danger of an incautious use of instruments in the practice of midwifery, as there can be no doubt that the sloughing and consequent adhesions which occurred subsequent to her former confinement, had arisen from that cause.

November, 1829.

ART. III.—*Some account of the efficacy of tight bandages and oil of turpentine, applied to the extremities in certain stages of Autumnal Fever.* By WILLIAM MACLAY AWL, M. D. of Somerset, Ohio.

Every autumn presents cases or stages of fever, which are termed congestive. The heart fails to throw the blood to the surface and the fluid stagnates in the great trunks; the bloodless extremities shrink up, and the hands resemble those of a washerwoman while engaged in her calling; the skin loses its sensibility, and heat, and is covered with cold perspiration; the faculties of sensation and volition are greatly impaired, the countenance becomes Hippocratic, and death seems—in fact generally is, impending. In this sad condition, internal stimulants, external irritation, frictions, and culinary heat are resorted to, but in most cases without effect.

In the summer of 1829, I aws called to see a labourer on the Canal, who had been hauled 20 miles in a wagon under a burning sun, vomiting the whole way. His limbs were cold, and covered with a profuse sweat. Death, indeed, seemed to be at hand. Sitting by his bed side, and reflecting on the most proper course to be pursued, I rubbed one of his almost lifeless arms, till the perspiration was dried up, and the skin acquired a little colour when I covered it up. But in 10 minutes it was colder than ever, and literally deluged in perspiration, as if the integuments had entirely lost their containing power. An observation of this fact, suggested to my mind the propriety, and possible advantage of bandaging his extremities, and I immediately proceeded to verify my speculation by reducing it to practice. Procuring a sufficient number of flannel rollers, I bandaged, tightly and neatly, the whole of his limbs from their extremities to the trunk of the body, and moistening them with spirit of turpentine, left him to his fate. In six hours he was a new creature. His countenance was revived, his pulse had risen, and the heat and colour of his limbs were restored. Regular paroxysms of autumnal fever supervened, which being met with the usual remedies, he recovered.

I have since the above case, used the bandages repeatedly, and always with success, sometimes as in the same case having to trust to it alone, the situation of the stomach preventing other means, and at other times using it both as an adjuvant, and a preventive remedy. And further, I have extended its application to various other adynamic prostrations of the system; particularly that attendant on cholera morbus, in which disease I constantly make it an auxiliary to the common means, when the case is severe. I have no doubt that it would contribute signally to the preservation of life in many cases of extreme capillary exhaustion, and might be found singularly useful in yellow fever.

The following is an extract from a letter received from Dr. Thomas H. Gibson, of Circleville, in this state, one of my correspondents, upon the subject under consideration. "I thank you a thousand times for your idea of bandages in

certain states of extreme capillary exhaustion. I saved the father of a large and helpless family, by their use after every thing else had failed. It was a case of cholera, aggravated by his having taken a large portion of gamboge, colomel, and tartar emetic pills. After having spent two or three hours, fruitlessly, in endeavoring to remove cold extremities, præcordial anxiety, difficulty of breathing, and other symptoms which portend dissolution, by ordinary and extraordinary stimulants; I ripped up a wollen frock and incased his extremities, and the result was delightfully successful. I wonder that I should not have thought of it long ago. It is the very thing I have wanted for years. It is precisely applicable, to those cases in which medicines have no longer any effect. Applied at the right time, it would save 7 in 10 of those who die of our western autumnal diseases."

November, 1829.

ART. IV.—*A Case of Organic disease of the Stomach, with the appearances after death.* By SAMUEL MARTIN, M. D. Col. Reg. Chir. Lond. Soc. of Morgan County, Ohio.

Samuel McCune, I suppose about 60 years old, and till within some months a strong and hard working man, mentioned to me in October 1828, that he had had, for a considerable length of time (perhaps nearly a year) a kind of burning pain, not however easily described, at the stomach; this pain was sure to come on soon after eating, but also came on at other times; after one or two eructations it was always relieved for a while. The tongue was clean, the appetite good, no sickness at stomach, and the bowels as he said, regular.—He said he felt "a sort of squeezing as if something was trying to pass through the stomach and could not;" and that he was "getting weaker and weaker."

I told him he might try for a while, a mixture of laudanum, sulphuric æther and tincture of asafœtida, which he did; I afterwards only saw him by chance, but I heard that the med-

icine had no good effect, indeed very little effect whatever, tho' taken in considerable doses; and that several other medcines he had tried, had very little effect of any kind: from these circumstances I began to suspect an alteration of structure, perhaps scirrhus, and mentioned it to the family, which was the cause of the patients desiring to be examined after death. Afterwards he tried by my desire extract of conium, for a short time, without effect; he used also for a short time the runnet of a calf with a little alleviation of his sufferings.

I saw him about three weeks before death; at this time he was greatly emaciated; the stomach could be felt, small and hard, and put into motion by the pulsations of the descending aorta; the abdomen in that part was a little protruded. Soon after this he vomited almost every thing that he ate; and sometimes, as I was told, a dark matter resembling coffee grounds. He became continually more and more emaciated till he died. His death, which had daily been looked for, thro' the last fortnight, happened on the 18th of July of this year.

A few hours after death, the stomach was examined; an incision was made through the abdominal parieties from the ensiform cartilage to the spine of the left ilium; the angular flap thus made being turned over the side, the stomach was exposed to view; it had a firm, white, shining appearance, like fascia; and was quite hard to the touch. Being removed from the body and placed on a table, it was laid open, by an incision along the line of the smaller curvature, from the œophagus to the pylorus. A small quantity of brownish fluid escaped.

About one eighth part only of the whole organ appeared exempt from disease, and capable of distention: this was on the smaller curvature and near the osophagus. I do not think the stomach, even by a forcible injection, could have been made to hold half a pint.

The stomach being spread open, the remaining seven eighths of its interior appeared studded over with soft hillocks of various and irregular shapes, some as large as a hazlenut and others of 3 or 4 times that size; resembling in colour the cineritious part of the brain, perhaps inclining more to a

brown; these hillocks, as I have called them, were so close together, that when the stomach was closed up, as in its state before being cut into, their sides touched and fitted together, and then the internal surface of the stomach, viewed through the incised opening, appeared only a little uneven.

On cutting into these lumps down to their bases, it appeared that the softness and the brownish colour reached only to a small depth, the color then changing gradually to that of cartilage, and the substance growing gradually harder, till arriving near the external surface of the stomach, they were of a cartilaginous and almost tendinous hardness, and could scarcely be indented by the handle or even the point of the scalpel.

It was an inch, I should say, from the top to the base of some of the larger lumps, or in other words, the wall of the stomach was there an inch thick. I observed no radiated but in the hardest part a lamellated appearance. It was at the pyloric extremity that the greatest hardness and near it the greatest thickness was. I think from some spots looking a little inflamed on the inner surface of the stomach, that if the patient could have lived a little longer, ulceration would have commenced.

The mesenteric glands in the vicinity partook of the disease. The liver was of a natural color and consistence; but there were two small cysts on its upper surface, which were not opened; it being understood that no parts except the stomach were to be meddled with; and I suppose they were of a common kind and had nothing to do with the patients sufferings. This is the only opportunity afforded me for 12 years of examining the human viscera; but I thing the spleen was less firm than natural, as it was ruptured whilst drawing it forward very gently with my fingers; and that the small intestines were rather firmer and thicker than natural.

I would remark, that I should suppose such a formation as here described would take place only in a contractile bag, like the stomach, possessed of several distinct tunics; and that it may be accounted for thus; For some time after the vessels had taken on the diseased action, the stomach remained

capable of contraction and distention. The contraction of the muscular coat would throw the mucous into wrinkles, the crevices were the clefts between the lumps I have described, and the cartilaginous matter was deposited by the vessels in the raised parts of the wrinkled surface,—between the brown substance, which was the diseased and thickened mucous membrane, and the fascia like external surface, which was the diseased peritoneal coat—in the mean time the muscular fibre disappeared gradually.

November, 1829.

ART. V.—*Some account of the Symptoms and Treatment of the Dengue, as it appeared and prevailed in the southern and central parts of Ohio, in the spring of* 1829. By DR. JOHN COOK BENNETT, of McConnelsville.

During the spring of the present year, 1829, the Dengue prevailed in Circleville, Marietta, McConnelsville, Malta and other towns lying in the valleys of the Scioto and Muskingum rivers. My own observations on this new visitor were chiefly made at the first of those towns.

SYMPTOMS.

The symptoms of Dengue, as it appeared in Circleville during the months of March, April, May, and June, A. D. 1829, were much milder than those of the south. This may be attributed to its having changed its latitude. The disease commenced with a chill, which continued from half an hour to an hour and a half, succeeded by fever which continued from one to four days before the cutaneous efflorescence made its appearance. The patient complained of lassitude, and an uneasy sensation in the limbs, pain in the back, head, and extremities. The pain in the head was an acute cephalalgy. It would be well to remark, that although there was more or less pain in the joints, there was no observable swelling.—There was some itching of the skin. The eruption or efflorescence differed essentially from that of measles, which

prevailed at the same time. The eruption in measles is flattened, that of the Dengue, or "French measles" as it was called, was elevated with an inflamed base, and pointed in the centre, not unlike prickley-heat. The eruption in measles, in many cases, was confluent, that of the Dengue was in all cases distinct; though it often appeared in clusters, blotches, or wheals, on separate parts of the body. The eruption in measles was general, that of the Dengue was principally confined to the thorax, neck, and face. In some cases a few pimples appeared upon the extremities. In a word the Dengue eruption may be said to range between the miliary eruption and that of measles, as to the size of the pimples, but it is rather more pointed than either. The eruption continued upon the surface from one to eight or nine days, usually about four, before it totally disappeared. Desquamation of the cuticle attended upon the subsidence of the eruption. The eyes were not generally inflamed, and there was but little or no cough. In this it differed from measles. The adnata was slightly tinged with red vessels. The patient experienced considerable pain when the eyes were moved in their orbits, and they were quite sensible to the touch. There was some soreness of the joints for several days after the eruption had disappeared. In two cases there were relapses after an interval of two or three days. These cases were said to be measles by the attending physician, but I was convinced from the appearance of the eruption, the pain in the joints, the pain in the head, back, and extremities, the absence of cough and sore eyes, &c. that they were Dengue. Some persons supposed that the cases, generally, which were not measles, were miliary fever, and I was of the same opinion until I made an accurate examination of all the symptoms of the three diseases—Dengue, measles, and miliary fever. The tongue was generally red on its margin, but foul in its centre. In some cases the urine was copious, clear and without deposit, in others scanty and high coloured, and in others turbid. Infiltration of the lymphatic glands of the neck and axilla now and then occurred. Many cases were attended with vertigo, and some with great mental uneasiness. Inappetency, and a vitiated taste attended upon almost every case.

The following are the symptoms of the epidemic at Marietta as detailed to me by Dr. Hildreth, in a recent conversation. It prevailed more or less during the months of February, March, and April, and was a disease similar to that described by the southern writers. The symptoms were all milder than those at the south, but of the same character. High fever, preceded by chilliness, continuing for one, two, or three days before the eruption made its appearance, and subsiding gradually as that disappeared. The eruption was chiefly confined to the neck, chest, and body—composed of small red pimples attended with great heat and itching; more diffused than the measles, and drying up in less time. No redness of the eyes, or cough. Severe pain in the joints of the wrists and ancles, ending in swelling and tenderness of the integuments.

Dr. Johnson, of M'Connelsville, informed me that two cases of this disease, attended with mild symptoms, came under his notice. Dr. Barker, of the same place, (McConnelsville) says that no cases have come under his immediate care, but he says that a disease called the "French measles," has prevailed to a considerable extent in the country. Dr. Martin of this county, (Morgan) says that a disease embracing the symptoms of Dengue has prevailed to a considerable extent with him. In several cases there were relapses after an interval of from four to six days. Dr. Martin seems to be of opinion that the disease is a variety of measles, although he says the eruption was more elevated and more distinct. Mr. Dana, near Waterford, Washington County, informed me that the disease prevailed to a very considerable extent amongst the inhabitants. I am informed that Dr. Bowen of Waterford, pronounced the disease to be nettle rash.

The symptoms of Dengue, as detailed by various writers, show that they differ very widely in different parts of the country, though the disease is essentially and identically the same every where. We shall proceed from the symptomatology of this disease, to the methodus medendi.

Treatment.

The early symptoms of their complaint required an active treatment from the practitioner. In most cases the inflammatory symptoms required that the lancet should be dipped in the *crimson fountain*, and a considerable quantity of blood abstracted. This practice was attended with the happiest consequences in my practice. Dr. Hildreth used the lancet in Marietta with good success. It is disapproved of, however, by Dr. Dickson, and by some of the other southern practitioners. The climate might make the lancet inadmissable in the southern states, when it could be used with propriety and advantage here. Dr. Drake in speaking of the treatment of Dengue says, "It should be borne in mind, however, that in changing its latitude, it may change its character so far as to require a treatment considerably different. We should expect, indeed, that it would assume a more inflammatory nature, and call for a bolder use of the lancet, than it seems to have required in the south." In a communication from Dr. Stennett, of Jamaica, to Dr. Betton, of Germantown, he says, "I find copious bleeding, at first, in able people, followed by small doses of epsom salts and tartar emetic, so as to produce slight nausea and action of the bowels, together with warm salt water baths, generally remove the disease in three days." As a cathartic I generally used flor. sulph and crem. tartar. aa 3i. pro re nata. In some cases, however, I used calomel in large doses. Pediluvium and hot fomentations were resorted to when we desired to promote natural perspiration. When the pain seemed to demand it, the tinct. opii was used freely and repeated at proper intervals. I frequently directed hot saffron tea as a diaphoretic. This was found to be an excellent remedy. It appeared to relieve all the unpleasant symptoms. Dr. Squaer, who was a great advocate for the use of cathartics in this malady, used the following:—"℞. extract colocynthidis comp. aloes socoterin. gummi resinæ, aa gr. jjj. hydrargyri submuriatis gr. xxiv. fiat massa in pilula duodecim dividend sumatur tres h. s." Upon the following day the pills were assisted by an infusion of senna or supertartrate of potash.

Some practitioners used cold bathing to the head in cases of severe pain, with good success. Injections with some gentle purgative were of service. The diet was light, and in fact the general regimen was purely antiphlogistic. Warm flannels were often applied to the abdomen in order to relieve urgent symptoms. The southern physicians used vesicants to relieve the sickness of the stomach. The means of cure adopted by Dr. Munos, and other physicians of the Island of Cuba were diet, partial baths of the feet and arms, sinapisms, laxatives, glysters, diluents, topical bleeding, oily and opiate frictions, applied to the painful parts, anodyne cataplasms, fomentations, and lotions of the same class, emollients, &c. &c. The treatment detailed above, succeeded in every case in this climate, so far as I can learn. Some persons did not require the aid of medicine, and were not even confined to bed at all, while others were very sick. I am of opinion that our mode of treatment will coincide with the views of our southern brethren, except so far as it regards blood-letting.

ART. VI.—*Brief notices of the Measles which prevailed at Circleville, O. in the spring of* 1829. BY DR. JOHN COOK BENNETT.

In the months of March, April, May and June, the measles prevailed in Circleville and its vicinity; chiefly, however, in the town. They affected every class of inhabitants—negroes not excepted. Not a few who had previously had the disease were reinfected and passed through all stages of the complaint with the usual symptoms. Even during the epidemic to which I refer, there were examples of its occurring twice in the same individuals, who, moreover, had experienced the disease several years before. I have not before known this malady so malignant.

Symptoms.—The disease commenced with a hoarseness, accompanied with a harsh dry cough, and uneasy or difficult

respiration. Some cases began with a chill of short duration. The eyelids were tumefied, and the vessels of the conjunctiva became turgid and inflamed. The cheeks were frequently wet with a flow of acrid tears, and the nostrils were surcharged with acrid serum, which irritated their lining membrane to such a degree as to occasion an almost incessant sneezing. A violent cephalalgia and excessive headach were, generally, amongst the symptoms. The rash, which was "in crimson, stigmatised dots, grouped in irregular circles or crescents," generally made its appearance upon the fourth day, but it would frequently appear on the second day, and in two cases, which came under my notice, it did not show itself till the sixth. One of these cases terminated favourably, but the other person died of congestion of the lungs. A general scarlet flush often accompanied the pathognomic dots. The sooner the efflorescence made its appearance, the slighter and more favourable in most cases was the attack; but in some few instances where the rash made its appearance even upon the second day, the patient died. Many cases terminated on the fourth day, but if the disease passed the fourth it invariably continued until the ninth or afterwards. About a day prior to the termination of the disease, whether upon the fourth or ninth day, the redness diminished, and there was a branny desquamation of the cuticle, over the affected surface, leaving more or less discoloration of the skin. When the disease terminated favourably on either the fourth or ninth days, as these were the critical days, no trace of it remained: but when it terminated unfavourably, and not in death, in some cases sore eyes continued for some weeks, and in others where there was a predisposition to phthisis, that malady or some other pneumonic affection succeeded.

All the cases of death were from hydrocephalus or congestion of the lungs, consequent upon an aggravated state of the symptoms. In children it was hydrocephalus, in adults it was pulmonary congestion. In most cases the catarrhal fever was very high. There was no intermission of fever from the commencement to the termination of the disease, but a very slight remission each day.

Treatment.—We hold that fever is necessary to such an extent as to throw the virus upon the surface; but when it passes that point it endangers life. As the pyrectic action was generally high toned, our remedies were antiphlogistic. As it regards blood-letting in measles we cannot agree with Dr. Good, toto cælo, owing, perhaps, to the circumstance of our western diseases requiring much more active depletion than European diseases. When called to treat a patient labouring under rubeola, I commenced with copious blood-letting, with the design of reducing the pyretic action so as to excite a healthy action on the skin. This plan was attended with signal success, as only one patient died who was bled. It was observed that those who submitted to blood-letting had the disease much lighter than those who did not. Bleeding was resorted to in any stage of the disease when the symptoms seemed to demand it. The high toned pyrectic action would frequently demand it in the first stages, and the pneumonic inflammation in the last. There did not appear to be any danger of typhous symptoms supervening upon the abstraction of blood, as the symptoms participated more of synocha than of synochus. If the fever had proved a synochus there would have been danger of exhausting the patient by blood-letting, and so producing a fatal termination in typhus; but the fever, was catarrhal, and participated much of synocha, and required active depletion to secure a safe or favourable issue. The abstraction of blood was in proportion to the urgency of the symptoms, from twelve to thirty-six ounces. Phlebotomy was repeated pro re nata. Where the bowels were greatly disordered, and the primæ viæ required active evacuation, I used submurias hydrargyri from forty-two to eighty-four grains at a dose. The 84 grain dose would produce no greater number of evacuations than the 42 grain doses, but each evacuation would be more copious. Calomel is surely a safe remedy, but it must be given in doses sufficiently large to work itself off, to avoid danger. It is the small dose, and not the large, that is attended with dangerous consequences, by remaining in the system so long as to produce a troublesome salivation, and it is these small doses that general-

ly produce mercurial diseases. In ordinary cases, however, I used supertartrate of potash and flowers of sulphur, a.a. 3i. mixed every three hours, until the *primæ viæ* were sufficiently evacuated. This was likewise used in some cases to promote the eruption. Emetics, of four grains of tart. antimo. mixed with ipecacuanha, sixteen grains, proved useful on the incursion of the disease, but subsequent to venesection.—They were of use in almost every stage of the disease. Where the cough or dyspnæa were troublesome, and where diaphoretics were necessary to produce a moisture on the skin, Dower's powder, oxymel of squills, small doses of pulvis antimonialis, a warm decoction of serpentaria virginiana and valerian combined, saffron tea, &c. were given as the symptoms seemed to require the one or the other. They were all used in turn with the happiest results. The doses were generally large. When the febrile symptoms were high and the thirst insupportable, cold water was allowed the patient as often as he desired it. It was used as a refrigerant beverage with good effect. The drinks were generally given hot, antecedent to the eruption, but after the efflorescence was fully established, cold water and other cold drinks were allowed. And in some cases cold refrigerent drinks were given anterior to the eruptions having appeared. The sick were generally kept cool in well ventilated rooms, but the currents of cold air were not suffered to pass immediately over the body of the patient. It was frequently necessary to wash the eyes with warm milk and water, in the morning before they could be opened, and to continue the bathing several times a day in order to remove the puriform discharge. It was necessary to wash the mouth likewise, so as to remove the sordes.—In some cases the whole body was bathed in warm milk and water. It will be unnecessary to enumerate other remedies, either of a general, specific, or topical nature, as the common remedies adapted to the symptoms were given as they were demanded or required. The food was light and vegetable, and usually in a liquid form. A diarrhœa would often supervene upon the subsidence of the eruption which always produced a favourable crisis. The diarrhœa was seldom cor-

rected, and when corrected it was very cautiously done.—Pediluvium was often employed to produce perspiration. Injections were used very freely in all stages of the disease, and the happiest results were attendant upon their administration.

October, 1829.

ART. VII.—*Remarks upon the Physiology of the Eye.*—BY JAMES C. FINLEY, M. D. of Cincinnati.

Having been often dissatisfied at the imperfect manner in which the physiology of vision has been treated by the most popular authors, I have thought it probable that an attempt to apply the principles of optics and physiology to some disputed points upon that subject, might not be unacceptable to the readers of the Western Journal.

It is unnecessary to speak of the structure of the eye, as this is familiar to every reader. It is sufficient to remark, that the eye is provided with two lenses which serve to concentrate the rays of light in its posterior part, so as to form an image upon the retina. Since the power of the lens depends upon its density, compared with the medium with which it is surrounded, the refractive power of the eye must principally depend upon the aqueous humour; because the chrystalline lens embodied in humours whose density is very nearly equal to its own must have its effects almost entirely counteracted by the concave surface of these humours which lie in contact with it. Hence if the chrystalline be removed an image is still formed, larger, and more indistinct, but sufficiently defined in its outlines, to serve the ordinary purposes of vision; though the range of vision is very considerably contracted.

The cornea has generally been described, as a segment of a sphere smaller than the globe of the eye. An accurate observation of the eye, however, especially in nearsighted persons, will show that the curue of the cornea deviates very considerably from that of a sphere, and as writers on optics

have demonstrated, that a parabolic curve alone will so concentrate the rays of light as to form a perfect image, it is probable that nature, whose works are liable to none of the objections which arise from the imperfection of human instruments, has adopted that form which is best suited to her purposes. Scarpa, who has pointed out this fact, attributes it to the compression of the muscles of the globe of the eye. But without stopping to point out the insufficiency of this explanation, it is sufficient to remark, that nature is not often under the necessity of resorting to mechanical contrivances, to remedy the imperfection of her instruments. On the contrary, the constant pressure of the humors of the eye, acting equally in all directions, must have a tendency to remove the prominence of the cornea, and to produce that state of things which we meet with in old age.

As objects approach the eye, the point at which the rays converge is thrown further back, and consequently it has been supposed, that the eye must have the power of accommodating itself to the distance of objects, so that the image may always be formed on the retina. Before examining the truth of the various hypotheses, which have been formed in explanation of this supposed power, it would be worth while to enquire if it be really necessary.

A screen placed at the focus of a lens whose focal distance is 3-4 of an inch, will admit of an extent of vision equal to the 1-8 of an inch without impairing the distinctness of the image. The image will be larger, as the screen is removed from the focus, either to or from the lens, but its outlines will be preserved sufficiently distinct for the purpose of vision. As the object approaches the eye, the point at which the rays converge does not change more than the 1-8 of an inch, until it comes within six inches of the lens. It is difficult to make satisfactory experiments of this kind upon the eye, on account of the difficulty of removing its coats so as to obtain a distinct view of the image, without impairing its structure. If we can be allowed, however, to apply this fact in explanation of the phenomena of vision, we will discover that the eye may be adapted to a very considerable range of vision, without any

power of accommodation. Without the limits of distinct vision, the eye is assisted very much by the memory in conveying a distinct impression of the object of vision, when this is familiar to us. This influence is exemplified by the effect of the imagination, in giving form and shape to those objects, which are indistinctly seen by dim twilight, or through the medium of a fog. In the same manner, when an object is suddenly placed close to the eye, the impression is confused and indistinct, and the eye accommodates itself to the distance, not suddenly, as if by muscular effort, but by gradually tracing the outlines until, by the assistance of memory and imagination, we are enabled to give them their distinct features. From the want of this assistance, we are unable to form a clear idea of the form of an unknown object that is placed out of the limits of distinct vision.

In addition to this, the eye probably has a power analogous to one possessed by the ear, of singling out the rays which proceed from a single point, and of bestowing upon them its undivided attention, and thus of forming a distinct outline, when the image upon the retina is very confused.

It is unnecessary to state to those at all acquainted with the principles of optics, that the contraction of the iris can exert no influence over the focal distance of the eye, as Richerand erroneously supposes. Its only office is to diminish the intensity of the image without affecting, as Magendie asserts, its size.

The estimate that we form of the size of objects, so far as this depends upon the eye, it is probable, depends upon what Dr. Brown has called the *muscular sense.**

*As many individuals are disposed to doubt the existence of a sense of this kind, it may not be improper to add, by way of illustration, a few examples of its exercise. It is by this sense we judge of the weight, shape, or size of objects, which we hold in the hand, by the resistance they offer to the muscles. By this sense we keep within the centre of gravity, and judge when we deviate so far from it as to endanger our falling. As instances of the great accuracy which it may acquire, we may witness the facility with which we direct our hand, in whatever position it may be placed, to any part of our body; and the rapidity and certainty, with which we regulate the motion of the arm, in throwing at a distant object.

There is but one point in the retina, sufficiently sensible to receive accurate impressions, and the eye in viewing an objeet, turns itself so that the rays from the different parts may be successively received upon this point. It is by the extent of motion necessary to gain a distinct view of the whole image, that we judge of its size. In viewing small objects, or those which are very familiar to us, the motions of the eye are made with such rapidity, that we do not attend to them, and appear to embrace the whole at one view; but there can be no doubt that we acquire our idea of any complex object, by a successive view of its different parts. The extent of motion necessary to embrace the whole of the object, will not be affected by the variation in the size of the image, in consequence of the rays converging to a point nearer to, or more remote from the retina, as the motions of the axis of the eye will be the same, whatever may be the imperfection of the image. If our estimate of the size of objects, depended upon the size of the image formed upon the retina, we could form no conclusion when they were brought within the point of distinct vision, as the image then very rapidly increases, from a two fold cause—the nearness of the object, and the imperfect convergence of the rays which proceed from it.

It is owing to the exercise of the muscles of the eye, which is necessary in viewing very near objects, on account of the imperfection of the image on the retina, that the eyes are so much fatigued in examining them.

This view of the subject, affords a very ready explanation of the fact, that we do not see objects inverted. We judge of their position, not by that of the image on the retina, but by the motion of the eye necessary to enable us to embrace the whole view. Thus we judge by the touch of the position of an object, in whatever direction the hand may be placed upon it.

The sympathy between the retina and iris is well known, and is analogous to what we observe in other parts of the system, where irritation produces contraction in distant muscles.

There is also a very close sympathy between the retina and the surface of the eye, the object of which is to produce a

closure of the lids, when the eye has been too long exercised.

This, we believe, is the only instance in which inflammation is uniformly produced by irritation of a distant nerve; and what makes it more remarkable, by one that is insensible to the irritation.

This fact in combination with others of a similar nature, may permit us to question the truth of a general received opinion, that the painful sensations we experience arise from mechanical violence offered to the nerve. The pain that we experience from wounding the surface or extremities of the body is very different from that of wounding the large braches of the nerves. The heart, lungs, serous membranes and ligaments of the joints, have no sensibility to ordinary irritants, either chemical or mechanical. But they are all exquisitely sensible when inflamed; the ligaments of the joints when stretched, and the vital organs when their functions are interrupted, produce agony of the most insupportable kind. The nerves which supply these different parts produce that kind of sensation, which is necessary to give warning of interruption of function, or the approach of disease; or to guard against those injuries, to which they are most exposed; and the pain probably is produced not by mechanical violence offered to the nerve, but by the consciousness (if we may use the expression) which the nerve possesses of the suffering of the part over whose welfare it presides.

The question has been frequently proposed by physiologists; why, since the image is formed upon each of the eyes, do we not see objects double. In reply, it is generally supposed that there are corresponding points in the nerves of the two eyes, which convey a single impression to the mind. In directing our vision, instinct or experience teaches us, so to direct the eye as that the rays of light may enter in the direction of its axis. They then fall upon the most sensible part of the retina, and by moving perpendicularly to the plane of the pupil, a greater number are permitted to pass that opening, and arrive at the posterior part of the eye. Hence we acquire the habit of moving the eyes in concert, and of referring the impressions made upon these points to a single object.

If we allow this concert in action to depend upon habit, as it undoubtedly does, then there can be no other corresponding points in the eyes; because the relative place of the image will change, with every change in the distance, and position of the object.

If the rays of light therefore, enter the eye in any other direction, the object will appear double, provided, the part of the nerve in the different eyes upon which they fall, is possessed of nearly equal sensibility: Otherwise the attention is directed to the stronger impression, while the other is overlooked. Hence an object placed immediately before the eyes appears double when the vision is directed to a point nearer or more remote; or when it is brought so near that the axes of the two eyes cannot be directed towards it. When the object is placed outside of the axis of the eye, it will not appear double unless it be very brilliant, and the view be steadily directed to some other object, because the rays then fall upon a point of the retina in one eye of so little sensibility that the impression is not attended to; and it is very difficult to control the efforts of the eye to gain a distinct view.

In conformity with these principles, when an effort is made to view an object very close to the eye, two similar bodies may be so placed, that the direction of the rays of light proceeding from them, will coincide with the axes of the eyes, and consequently, an impression will be conveyed of the existence of but one object.

Something analogous to this, we have in the sense of touch. When the contiguous surfaces of the fingers are placed upon a minute object, a single idea is conveyed to the mind, but when by crossing the fingers, surfaces which are not habituated to act in concert are applied to the same object, two distinct impressions are conveyed to the mind.

It has been supposed, that the mind attends only to the impression made upon one of the eyes, and in confirmation of this opinion, an experiment of Mr. Lawrence, has been lately suggested to me.

It is alledged that when the sight is directed to an object at the distance of 15 or 20 feet, if the finger be moved before

the eye, until a shade is cast over the object, it will be found that the distinct view is more obstructed when the rays of light are intercepted from one eye, than from the other; and it has been supposed from the results of this experiment, that the right eye is generally used in preference to the left.

There appears to be some mistake on this subject. The object will appear as if viewed through a semitransparent medium, when the view of either eye is intercepted, and nearly to the same extent; consequently, the indistinctness would appear to arise from the fact that in spite of our efforts to fix our attention, the finger diverts it from the other object; and this experiment may be considered as confirming the received opinion, that both eyes are used in vision.

Dec. 1829.

ART. VIII.—*A case of Morbus Cœruleus, attended with infiltration of blood under the hairy scalp.*—BY DR. WILLIAM M. VORIS, of West Union, Ohio.

The subject of the natural defect in the organization of the heart, constituting the disease before us, is a little girl aged nine years.

She is about the ordinary size for one of her age, and her general health is as good, as could be expected in such a case; all her functions being commonly performed well, excepting the circulation. The whole surface of her body presents a purple or bluish colour more or less deep, and is sometimes more so than at others. The sclerotic coat of her eyes is deeply tinged with dark red blood, her eyelids, lips and ears, are of a deep purple hue; her fingers and toes of the same, and their extremities much enlarged. She is extremely sensible to external impressions; her respiration is constantly more or less impeded; her pulse is always irregular, and manifests to the fingers a tremulous action; sometimes a kind of angry motion, as if the heart was labouring preternaturally; and these peculiarities are aggravated by the least exertion or stimulus acting on the body or mind. She, nev-

ertheless, possesses an acuteness of perception and understanding, rather above her age, and does not exhibit that hebetude, and deficient energy, which are generally described by authors, as attending this disease.

She has generally enjoyed the amusements and sports of her brothers and sisters; though she could take no *active* part in their exercises; but followed them slowly from one place to another, when they were playing, and appeared to wish she could participate in their operations. She is so sensible that exercise always produces sensations of anguish, that she has not for several years, dared to do any thing that would excite her system, unless compelled by unavoidable circumstances.

Her parents told me that several physicians had predicted that their little daughter would not survive the age of fourteen years, and that it was likely she would expire suddenly.—This her little brothers and sisters overheard, and told her, the doctor had said, she would not live long. Poor little Jane heard it with serenity, but not without some degree of sorrow and anxiety.

Her general health, as mentioned above, has been moderately good, but from the time she was capable of expressing herself intelligibly, she has occasionally complained of severe pain in her forehead and temples, which was sometimes excruciating. These paroxysms commonly continued from twelve to eighteen hours, and left her in her usual health.

About the 15th of July last, she was attacked with this pain in her forehead and left temple, which continued and increased to an alarming degree. On the 25th, the family, residing about 15 miles from town and not before having had a physician, became alarmed, and sent for my partner, Dr. Wilson, or myself. On the evening of this day, I visited her, about ten days after her attack. I found the scalp swollen to an alarming degree over every part of the head, excepting the os occipitis. The forehead, eyebrows and lids, partook of this swelling to such a degree that it was difficult to separate the eyelids so as to expose the eyes. The eyes also were swollen and their vessels loaded with blood. Although, as

her parents told me, the febrile symptoms had considerably abated, during the two days previously, her pulse was still excited, and attended with the peculiarities above mentioned. Her tongue was livid and dry, skin harsh and husky, urine scarce and lateritious, and thirst continual. The stomach sympathized, and was affected with loathing of food and nausea. She was no wise able to hold up her head, unless supported, and appeared inclined to lie with it low. Her sufferings were at this time extreme. Her pain was in paroxysms, which lasted ten or fifteen minutes, and came on as often as every half hour; in the interval she commonly lay composed, and sometimes slept. Although she laboured under so much vascular excitement, with determination to the brain, and suffered so much pain, that she often wept with agony, she had no mental derangement, nor exhibited the least evidence of oppressed brain.

When I examined her head, I found that the skin all over the swollen part, had assumed the deep purple colour, in perfect keeping with the extreme parts mentioned before. On the first examination I took it to be a case of hydrocephalus externus; but upon examining more particularly, my views were changed. On applying the fingers to different parts of the head, a fluctuation was unquestionable, and the scalp was evidently detached from its cellular connexion with the pericranium, in every part, excepting behind. She had received no injury, neither had previous disease existed in this part; consequently, suppuration could not reasonably be suspected.

The poor little sufferer's case appeared to me almost hopeless. She was in extreme pain, and required immediate attention; but with regard to the medical treatment, I was at a loss to decide on a judicious plan. After using various means, calculated to restore the lost equilibrium, and invite the force of the circulation to the skin and extremities, so as to unload the vessels of the head; I resolved on trying the application of a large blistering plaister to the nape of the neck. This was applied the same evening, about four hours after I first saw her. I gave her at the same time 10 grs. of the protochloride of mercury, succeeded by pulv.

jalapi et supertart. pot. a a gr. xvi. a few hours afterwards. By 8 o'clock next morning the cathartic had operated very freely on the bowels, the blister had drawn well, and was filled with a transparent and very tenacious jelly, which could be cut into slices with a knife. By this time her pain was considerably mitigated, and her eyes less inflamed, yet the tumefaction was not sensibly diminished.

These means promising no more than a temporary mitigation of pain, I determined at 9 o'clock this morning to evacuate the fluid by making a puncture in the temple. On taking a view of the circumstances of the case in the aggregate, I thought there could be no reasonable hope of a final recovery; but concluded this operation promised to relieve the severity of the pain, by taking off the distention and compression, produced by so large an accumulation of fluid, and consequently to mitigate the violence of the other symptoms.— When I withdrew the lancet, after making a free opening in the most dependent part on the left temple, there gushed out, *in pleno rivo*, a black fluid with a very slight tinge of red, which was doubtless dissolved blood, which had been extravasated, by a morbid action of the vessels. The fœtor was considerable, yet not more so, than might be expected in a fluid of this kind, which had been extravasated for several days, and of course had lost its vitality. After a pint and a half was discharged, it sudddenly ceased flowing; and fearing that syncope would take place, (of which there were already symptoms) from the sudden removal of the stimulus of distention, I closed the orifice, and placed her in a situation as favourable as possible for rest. In a very few minutes, the little sufferer expressed more ease than she had experienced since the beginning of the attack.

I now directed the parents of the child to encourage the discharge of the fluid, by opening the orifice two or three times a day, until all should be evacuated; and at the same time applied, an equally compressing bandage as firmly over the head as she could bear. As there still appeared to be a considerable determination to the head, I directed pulv. jalap. and crem. tart. each 15 grs. to be given every twenty four

hours. I also advised sinapisms to be applied to the extremities, occasionally, and friction with hot brine to the surface of the body generally. A light and spare diet, was likewise enjoined.

On the 30th of this month, I saw my patient again. The parents informed me, that considerably upwards of half a gallon of fluid had been discharged, since I saw her before; and that the febrile excitement had entirely left her soon after my departure. She had been for the most part free from pain, and had rested well at night. The orifice in the temple had closed, there had been no discharge for two days, and the fluid was fast accumulating.

31st. The patient rested poorly last night, and the swelling is nearly as great as ever this morning. I immediately determined to make an opening, in the right temple, which was done, and from this was discharged about a pint of fluid, with considerably more of the reddish tinge than the former.—Shortly after this opening was made, the orifice made at my first visit, broke open spontaneously and discharged about the same quantity. From the two orifices, nearly all the fluid was evacuated, and the scalp lay loose and flabby over the cranium; and was entirely detached from the frontal, temporal and parietal bones.

The symptoms appearing so much more favourable at this time, than at first, I was encouraged to prescribe still further. Accordingly I had a cap of sheet lead prepared, and having introduced a tent into each orifice, and applied the above mentioned bandage, I put on the cap, and bound this on with another bandage. I directed these bandages to be removed morning and evening, and the head to be rubbed well with a strong volatile liniment. The jalap and crem. tartar to be continued, also the frictions with hot brine, and a liberal diet, if her stomach would receive it.

Aug. 4th. Received a letter from the father of our patient to day, in which he writes as follows—

"Jane has (I think) mended daily since you were here. She

is now able to set up occasionally in her crib, and talk a little to those around her. The orifices have dischsrged at different times, and the fluid is neither so thick nor black as formerly. The blackness has in a great measure left her eyes; she can open them about half way, and keep them so when the room is darkened. The cream of tartar and jalap, have not been so effectual as at first, and we have sometimes to assist them by injections."

Aug. 5th. Sent by a messenger this morning the following prescription. Continue the lead cap and bandage to the head with the liniment: also the friction with brine. Discontinue the jalap and cream tartar, and use two or three of the following pills every night. ℞. Blue mercurial mass, aloes and squills a. a. one grain, mixed and made into one pill; of the sol. sulph quinine, half a teaspoonful four or five times daily, with 6 drops of elix. vitriol. Apply to the eyes occasionally a few drops of the following collyrium. ℞: Sulph. zinc. Acet. plumb. a. a. 1 gr. aquæ distillat. ℥j. misce. To which add 8 drops of laudanum.

Aug. 11th. The father same to town to day, and says Jane is mending daily; has a good appetite, and is able to set up frequently. The swelling has entirely left her head, excepting on one temple which appears to contain about an ounce of fluid. The orifice on that side has healed, and the other is discharging pus. The inflammation has almost left her eyes, and the deep purple colour of the extreme parts has become considerably lighter; the ends of her fingers are comparatively smaller than since her birth, and she is evidently gaining flesh and strength every day. The sol. sulph. quin. et acid. vit. appeared to increase the excitement, and after giving them a few times, he discontinued them.

As these medicines now appeared to be admissible, he was directed to resume their administration.

I received no further information respecting this interesting case, until the 25th of September, when I was called to visit a patient in the same family. I found little Jane enjoying a state of health and strength, considerably better than she was used to formerly.

Her parents told me she was more fleshy than she had ever been; that she had a good appetite, was lively and cheerful, and used no medicine excepting an occasional laxative. The scalp had united again as firmly as before her illness. She still, however, had all the symptoms characteristic of her congenital disease.

December, 1829.

ART. IX.—*An Inquiry into the Pathology and Treatment of Yellow Fever, as it prevails at New Orleans at this time, August*, 1829. By DR. LYMAN CRONKRITE.

PRELIMINARY REMARKS.

The nerves form several distinct systems entirely different in function, and in some measure independent of each other; in as much as each system performs its function separately and without the aid of the other—yet bound together as a whole.

Each nerve or nervous filament, has a separate origin in the brain, and proceeds to its place of destination for the purpose of performing one office and no more. Nor is one nerve or nervous filament capable of performing the office of another. Thus the optic nerve is capable of performing only the office of vision. If irritated it conveys no sense of pain, but only an impression of light. The auditory nerve cannot perform the office of seeing, tasting, feeling, nor smelling; but only that of hearing. Nor can the nerves which are distributed in the skin for the purpose of common sensation, perform any other function of the human system. Thus they have each a separate function to superintend, and are incapable of doing more.

If a part is to perform more than one function, nerves of various kinds, corresponding to the number of functions to be performed, send branches or filaments which unite in the form of a plexus, and then go to supply the part, as in the abdomen and thorax.

Anatomical investigations have led to the identification of the nerves, which perform the functions of seeing, hearing, tasting, and smelling; the nerves of common sensation, and voluntary and respiratory motion. But there are others of no less importance, whose existence is only known by the office they perform. These are the nerves of involuntary motion, secretion, &c. These may have a separate origin in the brain and course through the body, or they may arise enveloped in the sheaths of nerves of other functions, and without separating proceed to their place of destination, giving a nerve the appearance of supplying several functions. But that they are distinct filaments, and have a separate origin in the brain is sufficiently evident from the fact, that they perform separate functions, and further from the fact, that the functions are distinct and not dependent upon each other. Thus voluntary motion may cease in a part in which sensation is perfect, or sensation may cease while voluntary motion continues—or sensation and voluntary motion both may cease, while the involuntary actions of the circulation and secretion still continue. So may secretion be increased, depraved, diminished or suppressed while the action of the blood vessels continue.

If a nerve of voluntary motion be irritated, pain is not the consequence, but motion in the muscles to which it is distributed; or if it be divided, motion ceases, and the muscles are no longer susceptible of being excited into action.

If a nerve of sensation be irritated at its origin, or any where along its course through the body, the pain is not at the point touched or irritated, but in the part to which it is distributed; and if it be divided, the part to which it is distributed loses its sensibility.

If a nerve of secretion be irritated, secretion may be increased or depraved, the same as if the cause was applied to the secretory organ itself; or if the nerve be obstructed by congestion, or other causes, secretion may be suspended.

It is the same with all the nerves of the human system. If any of them be irritated, their functions may be increased or deranged, or if obstructed may cease altogether.

These facts are interesting in a pathological point of view. For if it shall appear, that the functions of various parts were deranged or suspended during life, and if upon examination after death it shall also appear, that the nerves which supplied those parts are diseased, we must conclude that such suspension or derangement was owing to the diseased state of the nerves.

Pathologists have divided diseases into classes, and have applied to one of them the title "Neuroses," because they have considered that there are diseases, to which they may especially give the title "nervous." But it is evidently a distinction without a difference. All diseases are nervous. That is, those morbid actions—that derangement of function—which constitutes disease depends upon the state of the nerves. As the nerves are the only agents which carry on *all* the functions in that perfect manner which constitutes health, so they only can carry them on in that imperfect or deranged manner which constitutes diseases. Deprive a part of its nerves and it is not susceptible of any action healthy or diseased. Motion, nutrition, secretion &c. cease, and death sooner or later ensues. That morbid strength and action in the sanguiferous system, which is observed in fever, depends as much on nervous influence, as that morbid strength of the muscular system does, which is observed in tetanus; and that debility of the secretory organs, and of the blood vessels, which manifests itself in fever, depends as much on the state of the nerves, as that debility of the muscular system which is observed in apoplexy. In short all action whether diseased or not, depends upon the nerves; and each morbid action depends upon the nerves as much in one disease as another. If any class of diseases are to be denominated nervous, fevers certainly have the best claim to the appellation, for in them the nerves exhibit most signs of disease.

Of the remote and exciting causes of Fever.—An opinion has long prevailed with the faculty, that the remote cause of fever possesses the power of directly "impairing the energy of the brain and nervous system," or in other words that it

has a sedative influence. They have been led to adopt this opinion, by observing the weakness of the pulse, the coldness of the surface, the lassitude, sense of fatigue and debility, the diminished secretion, and other symptoms which usher in its first stage. But it may well be questioned, whether this debility be real, or whether it is only apparent. Whether the "energy of the brain and nervous system" is really "impaired" or whether some cause has thrown the circulation off its balance, produced under determinations and congestions upon the brain and nervous system, deranged or obstructed their functions and thereby caused the phenomena of fever.

The principal exciting causes are exposure to wet and cold, intemperance in eating and drinking, violent exercise in the hot sun, great fatigue, and excitement of the passions. These shall be considered separately.

Exposure to Cold.—A regular state of the functions of the skin, is indispensably necessary to the preservation of health. It is this function which tends to preserve the heat of the body at the same degree in all temperatures. If a man is exposed to a shower of rain or to chilling dews and night air, next day he finds his perspiration obstructed. The heat accumulates in his system in consequence of its natural outlet being obstructed. The pulse becomes quick, headach, lassitude, sense of fatigue and debility, redness of the eyes, &c. indicate a tendency to a disturbed equilibrium of the circulation and a determination to internal parts.

Intemperance in Eating and Drinking.—These causes have also a strong tendency to disturb the balance of the circulation, and produce determinations upon the brain and other internal parts, as the numerous cases of apoplexy, caused by them bear ample testimony. After a debauch, the deluded votary of *pleasure*, feels a slight headach, quickness of the pulse, thirst, heat of the skin, redness of the eyes, a fured tongue and other symptoms which indicate a tendency to a broken balance of the circulation, and which in a *yellow fever atmosphere*, are not unfrequently the precursors of disease.

Violent Exercise in the hot Sun.—This has also a strong tendency to destroy the balance of the circulation, and cause undue determinations upon the brain and nervous system. It is usually combined with others which increase its force. A man, with obstructed perspiration perhaps from the last nights exposure after taking "something to drive out the heat" goes to work in the hot sun. The circulation is hurried by the stimulus of the exercise, and the heat which accumulates in the system in consequence of obstructed perspiration. To this is added the stimulus of the heat of the sun, and perhaps of a full stomach. The pulse becomes quick, the eyes red, the face flushed or pale, the head pained, or giddy, nausea, lassitude and sense of debility, loss of strength in the lower extremities or of the whole system, faintness, dimness of sight and other symptoms occur, which indicate great determination upon the brain and usher in yellow fever; or if the determination to the brain be still greater, the patient dies suddenly with symptoms of violent congestive fever, or apoplexy.

Excessive Excitement of the Passions.—Fear in its varieties is probably the strongest of the depressing passions. If a person under the influence of fear be examined, it will be found, that the pulse is small and frequent. From this circumstance we judge, that less blood circulates through the radial arteries, than in other conditions of the body; and from analogy, that less blood in a given time goes through all the extreme vessels. The countenance also becomes pale, the skin constricted, and the blood accumulates about the heart and other internal parts. The heart labours with convulsive throbs to relieve itself of the accumulation, the chest heaves with laborious effort. This state of things must necessarily; and from the organization of the system, soon produce similar accumulations and determinations upon the brain, and not unfrequently a temporary delerium arises. This is fear in its most frantic excess, but in milder cases, it acts in the same manner only in a less degree. Here is a powerful cause for breaking the balance of the circulation, and may thus prove the exciting cause of fever.

Anger is one of the strongest of the exciting passions, and when in excess no one will pretend to deny, that it produces determinations upon the brain. The eyes become red, the countenance flushed, the expression will be hurried, and not unfrequently apoplexy ensues. Here again is a loss of equilibrium in the circulation, and why may it not be the first of those deranged actions which constitute disease.

I can see nothing in the nature of any of these causes, which should render them capable of co-operating with a sedative, in "impairing the energy of the brain and nervous system;" on the contrary, they are all, either directly or indirectly stimulating, and have a strong tendency to break the balance of the circulation, to produce congestions and determinations upon the brain and nervous system, and obstruct or derange their functions.

If miasma possesses the qualities of a sedative or narcotic, it is different from all other substances of that class in one important particular. For a person may breathe it for months, nay, years, with impunity, provided he meet with no exciting cause. Opium, digitalis, and all the numerous substances of the class of narcotics, act immediately after having been taken into the system. But miasma alone, as if forgetful of the attributes of its nature, and ignorant of its power, lies quiet in the system, until an exciting cause rouses it into action. It then goes about to "impair the energy of the brain and nervous system," and pursues its work of debility until the *vis medicatrix naturæ* becomes alarmed, and with the resolution and strength of a Hercules attacks and kicks it out of doors; or, unequal to the task, falls itself in the contest!

Ratio Symptomatum.—I will not stop to prosecute the needless enquiry, whether miasma is introduced into the system by way of the stomach or lungs; or whether it is absorbed by the skin. It is sufficient to know, (and the fact is self evident,) that it comes in contact with nerves which are susceptible of its influence, and which convey the impression to the brain. The system being under its influence, there is a tendency to a loss of balance in the circulation and excitability, and de-

terminations, upon the brain and nervous system evinced by a slight disturbance of the various functions of the body, such as depraved appetite, irregularity of the secretions from the liver, slight headach and giddiness, furred tongue, restlessness, disturbed sleep, heat of the skin, sense of lassitude and debility, irregular state of the bowels and of the functions of the skin, &c.

These symptoms may continue a long time without causing much inconvenience to the patient, unless some cause sufficiently powerful, throws the circulation completely off its balance. Great determinations to the brain and nervous system then take place, obstructing or deranging their functions. The nerves of sensation exhibit signs of congestion or obstruction, by the torpor, dullness of perception, insensibility to pain &c. which prevail in every part of the body; or of increased excitement, in the pain of the head, back, stomach and extremities, "aching of the bones," universal soreness, restlessness and intolerance of light and sound.

The nerves of voluntary motion, exhibit signs of congestion or obstruction, by the weakness or paralysis of the lower extremities, the universal sense of debility and prostration of strength; or, of irritation, in the spasms and convulsions which in some instances usher in the disease, but more frequently arise during its progress, or at its termination.

The nerves of involuntary motion exhibit signs of congestion or obstruction, in the feebleness of the pulse and diminished re-action; or of irritation, by the increased force and frequency of the pulse, and the general increased re-action which prevail in the arterial system.

The nerves of secretion, exhibit signs of congestion or obstruction, by the torpor which prevails generally throughout the glandular system; or of irritation, by the profuse but depraved secretions which sometimes take place from the stomach, bowels, liver, skin, &c.

Should the question be asked, why miasma causes determinations to the brain and nervous system, I would answer it by asking another. How do those medicines which are called emenagogues produce a determination to the uter-

us, or those called diuretics, to the kidneys? External agents have various qualities, and produce specific and various effects upon the human system. Emenagogues produce a determination to the uterus, diuretics to the kidneys, and miasma to the brain and nervous system.

Determinations to the brain and nervous system having taken place, and deranged or obstructed their functions, besides the diseased action or torpor, which prevail in every part of the system, there is a torpor in the portal circle, which causes blood to accumulate there. The vessels of the stomach, intestines, liver and spleen, and all the abdominal viscera become turgid with blood. This, while it removes a large portion of blood from active circulation, and thereby prevents immediate destruction to other important organs, serves also, in turn, to keep up the torpor, to prevent secretion, and indirectly to maintain the congestion of the brain and nervous system. In the progress of the disease, reaction becomes established. Whether from suppressed secretions, accumulated excitability, an effort of the vis medicatrix naturæ, or all combined, it is perhaps unnecessary to enquire.—The blood now circulates with greater velocity, and passes more frequently through the lungs, is more completely decarbonized and consequently receives a greater quantity of caloric; which, in consequence of the torpor of the cutaneous exhalents, which in health serve to regulate the temperature of the body, the heat accumulates in unusual quantities. This acts in unison with the natural efforts of the system in increasing the violence of reaction. The *vis a tergo* of the circulation being increased, the portal circle and other congested parts become partially relieved, and the blood goes into active circulation in larger quantities, and passes more freely and copiously to the surface. Reaction, ultimately runs itself down. The brain and nervous system having sustained serious injury the various functions are carried on in an imperfect or disorderly manner. Depraved secretions take place from the stomach, intestines, liver and skin. From the surface, exudes a clammy moisture which

soon putrefies. The stomach secretes an acrid matter, which corrodes and inflames its surface. The liver secretes an acrid fluid different from healthy bile.

The nerves of sensibility evince the injury they have sustained, by the insensibility which pervades every part of the system.

The nerves of voluntary motion evince the injury sustained, by the prostration of muscular strength, or by morbid and irregular muscular contraction.

The nerves of involuntary motion manifest the injury they have sustained, by the feebleness of the pulse and weakness of reaction generally; while those of secretion exhibit the same, by the paucity or depravity of the secretions.

In short, the brain and nervous system in general show the degree of injury they have suffered, by their inability further to carry on the functions of life, and the patient sinks in death.

SYMPTOMS.

First Stage.—The patient is attacked suddenly with pain across the forehead, back, stomach and extremities, sickness, redness of the eyes, prostration of strength, weakness of the lower extremities, giddiness in the head, torpor of the bowels, chilliness, small frequent pulse, load at the pit of the stomach, tightness across the chest, laborious breathing, oppression at the precordia, tenderness in the epigastrum, lassitude and sense of debility, skin dry, suppressed secretions, urine sometimes suppressed. Occasionally the patient vomits bile, but more commonly only the ordinary contents of the stomach.

Second Stage.—The pain in the head now becomes more intense, so does the pain in the back and extremities. There is a universal soreness of the flesh and "aching of the bones." The back feels as if it was "broken." There is an acrid, burning sensation in the stomach, pain and great tenderness in the epigastric region, redness of the eyes, intolerance of light, great heat of the skin, which is usually dry, but sometimes deluged in moisture; pulse full and strong, vomiting in-

creased, bowels still torpid, increased tightness across the chest, laborious respiration, head giddy, sense of debility and lassitude increased, tongue red, and covered with a white or yellow fur, weakness of the lower extremities, in some instances amounting almost to paralysis, countenance flushed and the expression hurried, thirst, great restlessness, watchfulness and delirium, depraved or suppressed secretions, stools watery.

Third Stage.—Without any symptom which indicates a favorable crisis in the disease, the patient becomes easy, "feels better," calls for food, and imagines himself recovering.—The pains gradually subside, the skin cools, but continues dry, has a soft uncteous feel, and becomes yellow; the tongue continues red, becomes dry and covered with a brown or yellow fur, the stomach at the commencement of this stage is comparatively quiet, but becomes again more irritable, pain in that organ at first nearly subsides, but comes on again, the burning acrid sensation arises now, if it had not before, bowels more easily moved; stools watery; extremities cold; breast sometimes hot; countenance hurried and anxious, slight pain and giddiness in the head; heaving of the chest; secretions still obstinately suppressed; great restlessness; black vomit; convulsions and death.

In some instances nearly every symptom of disease subsides. The pulse and skin become natural, the patient gets up, walks about his room, calls for food, and imagines himself well. This state continues from 6 to 24 hours, when in the midst of apparent security, he is seized with restlessness, black vomit, delirium, convulsions or stupor, and expires. Frequently the skin does not become yellow until after death.

Sometimes a chilliness continues during the whole progress of the disease.

Post mortem appearances.—The brain exhibits signs of congestion. The ventricles contain a large quantity of yellow serum. The vessels are turgid in every part of the organ, but more particularly so in the cerebellum. About the origin of the nerves there is found a network of turgid vessels. The same is observed in the spinal marrow.

The ganglionic system of nerves, as discovered by Dr. Cartwright, exhibit signs of congestion and inflammation. The stomach signs of inflammation, corrosion, and disorganization, and usually, contains the matter of black vomit. The liver is sometimes nearly natural, at others patches of inflammation are observed; the gall bladder sometimes contains a quantity of dark ropy matter, resembling vitiated bile; at others it is found empty, secretion having been entirely suppressed. In one instance, pus was found about the knee joint, in the cavity of the hip joint, and in the spermatic chord. The vessels of all the abdominal viscera turgid with blood.

In short, the appearances observed on dissection are abundantly sufficient to account for the phenomena of the disease, and the fatal termination.—For it is not to be supposed, that in a disease, in which all the functions of the body are deranged, any one part will exhibit diseased appearances to the same extent, as in those affections in which only one part is diseased, or one or two functions deranged. A disease of the whole system never falls with the same violence on any particular part, as local diseases do. Add to this, that the intervention of the third stage, between the second stage and death, gives an opportunity for morbid accumulations in some measure to subside, so that upon examination after death, diseased appearances are not observed to the same extent, as if death had happened during the first or second stage.

Individual symptoms separately considered, and their connexion with the Pathology of the Disease, pointed out.

The brain and nervous system are the parts primarily affected, and the rest of the system consecutively.

Among the earliest symptoms of the disease, are the *pain and giddiness in the head.* They evidently arise from too great a determination to the brain. The pain is across the forehead, and is accompanied with a sense of fullness and heaviness above the eyes, which are red, feel full and protruded; there is pain in the eyes, intolerance of light, dilated or

very small and contracted pupil. If any further evidence were necessary to prove that the brain suffers, dissection furnishes it, for its vessels are found turgid after death. Throughout the convolutions of the piamater they are gorged with blood, and the ventricles are filled with serum.

As the patient feels a *pain in the back, loins, and extremities*; and "aching of the bones," is it to be supposed, that determinations to these parts have already taken place? certainly not.—The pains are different from those which take place in inflammations. There is rather an uneasiness or aching.—The pains are not constant, but remit, intermit, and wander about. They probably arise from determinations to the brain, and nervous system; perhaps some affection of the nerves, either at their origin, or some where along their course through the body; for if a nerve of sensibility be injured at its origin, or any where along its course through the body, the pain is not at the point irritated or injured, but the part to which it is distributed. Now all the nerves are found diseased at their origin, and amongst the rest the nerves of sensibility. Wandering pains in the extremities, and various parts of the body, are frequently symptomatic of affections of the brain.

The pain in the back extends to the stomach, and is attended with a sense of tightness across the chest. This sensation corresponds with the seat of the diaphragm. The pain in the stomach is not constant, but intermits as if spasmodic. Indeed, patients have compared it to the painful sensation which arises from eating *choak cherries*, or green fruit; and which evidently arises from a spasmodic affection of the stomach and œsophagus. There is also a *sickness of the stomach*, which usually yields to no remedy. It is mitigated by some, but subsides entirely, only with the disease. These phenomena appear to be symptomatic of an affection of the brain, and nervous system. Vomiting is usually a symptom of compression of the brain, and the pain and stricture may arise from under determinations to the brain, and origin of the motor nerves and nerves of sensibility, for they are found diseased after death. Although I suppose the stomach to be affected sympa-

thetically at first, I do not doubt its becoming the seat of a great deal of disease, during the progress of the fever.

The *torpor of the bowels*, is altogether different from that costiveness which arises during health, or in diseases of a milder character, and which in some measure depends upon a deficiency of secretion. It seems to be more nearly allied to palsy. It is a symptom of concussion and compression of the brain; and, in Yellow Fever, may arise either from a great determination to that organ, or inflammation or congestion of the ganglionic system of nerves, obstructing their functions. Cathartics do not act readily. Bloodletting, by relieving the brain and nervous system, facilitates the operation of purgatives. Those cases in which, instead of torpor of the bowels, there is a dysenteric purging, are usually milder, exhibit less cerebral affection, and yield more readily than those in which there is a torpor of the bowels. All the nerves which supply the intestines, are found much diseased after death.

Weakness of the lower extremities.—Immediately after the pain in the head and back, the patient feels a loss of strength in the lower extremities, and frequently either falls down, or finds it necessary to sit down. In milder cases, the patient only complains of weakness of the legs, and stumbles when he attempts to walk; in others, there is a paralysis. Is argument necessary to prove that this symptom is owing to disease of the motor nerves of the lower extremities? If so, a very good one is found, the turgid state of the vessels of the spinal marrow, and at the origin of all the nerves which go to the lower extremities.

Suppression of Urine.—The kidneys are supplied with nerves, whose office it is to superintend the function of the secretion of urine. These nerves have their origin in the brain. Notwithstanding any connection they may have with other nerves, or however intricate may be the connection of their filaments with those of the nerves of other functions, their *ultimate* origin is in the brain, and so long as they continue in a state of health, the secretion of urine will continue; but when they become diseased, either at their origin, or any where along their course through the body, sufficiently to obstruct

their functions, the secretion of urine must be suspended. I will not enter into the controversy, whether the nerves are organs which vibrate, or whether they carry a fluid. It is sufficient for my purpose to know, that they are the organs of communication between the brain and distant parts, and that they are the organs of sensation, motion, secretion, &c.

There is a disease which occurs unconnected with any febrile affection, and which consists in a suppression of urine. Not only none is evacuated from the bladder, but none is secreted by the kidnies. The patient dies with cerebral affection distinctly marked. Suppression of urine is an attendant on the most malignant form of the disease, and is usually a fatal symptom. In every case in which I observed it, the cerebral affection was very considerable. I observed it in several instances, it occurred in one instance among my own patients. It was in a man of strong robust constitution, and full habit, and was attended with great intolerance of light and sound, constant pain in the head, and great tenderness when the head was moved suddenly, redness of the eyes, heat about the head, and throbbing of the temporal arteries.—The urine in this case was suppressed 24 hours before the attack.—The patient was freely bled and purged, and within 18 or 20 hours from the attack, urine began to be secreted. It became suppressed again, however, and the patient died with the black vomit.

Suppression of the Secretions of the Skin and Liver.—These like suppression of urine, are undoubtedly owing to diseases and obstructions of the nerves of secretion. They are most complete and obstinate in those cases, in which evidence of such obstruction occur.—In such cases they usually resist the action of sudorifics and cathartics, and when the ordinary means have failed, the loss of 20 or 30 ounces of blood, has procured profuse secretions.

Chilliness.—This symptom is usually accompanied by a small pulse, dry skin, load at the pit of the stomach, paleness of the countenance, giddiness in the head, and other symptoms which indicate a determination to internal organs. It

is seated in the nerves of sensation, not at their sentient extremities, for it continues while the surface is burning hot to the touch, and the real heat of the system is several degrees above that of health. It is a false sensation of cold, and arises from some affection of the brain, or nerves of sensation at their origin. What this affection is, or what is the precise condition of the nerves, may be difficult to determine, as much as to determine what is the precise condition of the brain, or nerves which gives rise to that false sensation of pain which patients sometimes imagine they feel in amputated limbs. It is accompanied with symptoms of congestion of the brain and nervous system and abdominal viscera, and is relieved by bloodletting. This fact was exemplified in my own person, in a case of intermitting fever. I was freely bled at the commencement of the cold stage, which was removed in less than a minute. Reaction was light.

Hurried expression of the countenance, difficulty of breathing and anxiety.—These symptoms are owing to an affection of the respiratory system of nerves. The fourth pair of nerves, the par vagum, portio dura of the seventh pair, glosso-pharyngeal, and spinal accessory, arise from a separate and distinct column of medullary matter. These are all respiratory nerves, and unite the parts on which they are distributed, into sympathy with each other. (Charles Bell,) The fourth pair go to the eyes, and the portio dura to the face, and serve to bring these parts into sympathy with the chest. This may account for that peculiar expression of the countenance which accompanies hurried respiration during health. The par vagum, glosso pharyngeal and spinal accessory, which go to the muscles of the shoulder, chest, larynx, tongue, stomach and diaphragm, together with the portio dura of the seventh pair, and the patheticœ or fourth pair, are all found diseased after death. A network of turgid vessels envelopes their origin, and is connected with their investing membrane. This may also serve in some measure, to account for the loss of voice, which in some instances, cannot be raised above a whisper. While the same appearances at the root of the

lingual nerve, may serve to account for the faltering of speech, and inability to put out the tongue.

The load and tenderness in the epigastrium, are evidently owing to congestion of the portal circle. Upon examination after death, all the viscera of the abdomen are found in a state of congestion.

Burning sensation in the Stomach—This symptom arises during the second or third stage, and succeeds the spasmodic pain of the first. It is accompanied by a red tongue, soreness of the throat, nausea and vomiting when any thing is taken into the stomach, sometimes appetite for food, and is succeeded by black vomit. It is owing to inflammation of the villous coat of the stomach, which inflammation *appears* to be excited by acrid secretions. Upon dissection inflammation of the stomach, and corrosion of its villous coat are observed. The organ is also found to contain the matter of black vomit.

Black Vomit.—Writers on Yellow Fever, have been fruitful enough in hypotheses, explanatory of the nature and origin of black vomit. Some have supposed it to be "an altered secretion of bile; others that it is "merely blood which has been effused from some of the small arteries, coagulated in the general cavity of the stomach, and its colour darkened by the absence of oxygen, or by some chemical decomposition;" others, again, that it is "a peculiar morbid secretion from the inflamed glands, and vessels of the stomach." The last hypothesis, seems to approach nearer the truth; for it cannot be denied, that it is a very *peculiar*, as well as a morbid secretion. With regard to the two first, I may briefly remark, that black vomit resembles in no respect either *bile* or coagulated blood; and, without attempting further to refute either of them, will add another to the number,—viz. That black vomit is a depraved secretion of the gastric juice. It is always found in the stomach, if any where; it is never seen in the liver or gall bladder; it is not always met with in the intestines; but is sometimes found there, in its progress through the canal. It is therefore reasonable to suppose, that it is a secretion from the internal surface of the stomach. But it

would be very absurd and unphilosophical to suppose, that a new set of secretory organs has been called into existence, on this occasion. It must, therefore, be a depraved state of some of the *natural* secretions. Now the secretions of the stomach, during health, are mucous and the gastric juice. Although mucous secretions are met with in various parts of the body, and although they all become depraved during the disease, yet no matter resembling black vomit has been seen except in the stomach. Among the innumerable glands and secreting surfaces, none except those of the stomach are capable in health of secreting the gastric juice; or, in disease, of secreting that depraved fluid, called black vomit. That the secretion of gastric juice becomes depraved, as well as others, I think cannot be doubted. For among the general *wreck of functions*, why should this escape? It may become even more depraved, for the stomach suffers during the disease, more than any other organ which has a secreting surface.

In the last stage of the disease, and about the time when the secretion becomes so far depraved, as to assume the appearance of black vomit, a distressing sense of hunger comes on, and if the sense of burning in the stomach has not occurred before, it is felt now. Here the depraved secretion of gastric juice excites hunger, and by its acrid qualities inflames the stomach. The qualities of this *depraved secretion*, or black vomit, are such, as to destroy the coats of the stomach very soon; and the patient seems to die much sooner, than might be expected from the progressive increase of debility. I have seen the stomach of very recent subjects completely denuded of its internal coat, without much appearance of inflammation beneath.

Spasms and Convulsions.—These symptoms are usually preceded by a calm. In some instances, as I have said, nearly every symptom of disease subsides, and the patient believes himself restored. *A case.* Wm. Bishop, was brought into the charity Hospital, in the last stage of yellow fever. Twenty four hours before his death, without any sign which usually marks a favourable crisis, nearly every symptom subsided.

Skin and pulse became natural; no pain in the head or elsewhere remained; no sense of burning, or sickness at the stomach, or tenderness in the epigastrium; tongue clean and moist; walked about the ward; had an appetite for food, and believed himself well; when convulsions ensued and carried him off. Dissection in such cases exhibits collections of serum in the cavities of the brain, and congestions of the brain and spinal marrow. Similar appearances are observed in cases, in which the patient has died of idiopathick tetanus or convulsions. In the above case, the patient had not been bled.—*Query.* Might not active depletion, in the first stage, by relieving the congestion of the spinal marrow and the determination to the brain which caused the effusion, have prevented the fatal termination?

TREATMENT.

The profession of medicine, has long been reproached, as hypothetical and uncertain; and it is a matter of astonishment to the candid observer, and not a little humiliating to professional pride, that opinions directly opposite, and modes of practice at direct variance with each other, although subject to the test of the same experience, should still divide the talent of the medical world. This can only arise from the readiness with which a portion of mankind adopt fashionable opinions, if sanctioned by the authority of great names, without stopping to enquire whether they are based upon sound philosophy and a corrrect estimate of facts. This kind of credulity tends more to retard the progress of sound pathology, than any other cause.

The period is anxiously to be wished for by every friend to science and humanity, when each member of the profession shall learn to exercise, on medical subjects, that faculty which gives man his distinctive prerogative over the rest of the animal creation. When the bed side, the dissecting room and the closet, shall unite their contributions, and every great subject be submitted to the scrutiny of reason and experience; then shall the science cease to be reproached as hypothetical, the

dogmas of the schools give place to a more sound and rational pathology, and medicine attain that proud pre-eminence on the scale of science, which from its nature and usefulness it is destined to acquire.

The bugbears debility and putrescency, like the idle phantoms of a morbid fancy, still haunt the imagination of a portion of the faculty; and paralyse the arm which otherwise might be "strong to save." There is probably no opinion so pertinaciously adhered to, but is supported by so few facts or so little rational theory, as that of the fatal tendency of bloodletting in fevers. There is, it is true, something in the phenomena of fevers, which to a superficial observer may seem to indicate debility. But whoever will take the trouble to understand the laws and functions of the brain and nervous system, and trace the connection between the symptoms of the disease, and the appearances observed on dissection, will find more evidence of deranged action, than real debility.

It must not be supposed, that in fevers nor even in inflammations, the strength will be so great as in health. The vigour of the system is always the greatest when all its functions are carried on in the most perfect manner; and no sooner does disease take place, or, in other words, no sooner are the functions deranged, than appearances of debility occur. I have seen a patient with pneumonia, whose strength was so much prostrated in a few hours, that he could not bear an erect position, without fainting; yet several copious bleedings relieved the symptoms, increased the strength, and with the aid of other evacuants cured the patient. Every practitioner of much experience in diseases of a congestive nature or in severe inflammations, who has dared to use the lancet freely, must have witnessed its effects in restoring the strength and imparting vigour to the system. It would be folly to suppose that debility real, which is cured by remedies so powerfully debilitating to the system when in health. The following case will illustrate the effect of stimulants in such circumstances. M. Johnson (of Mississippi) had one of those forms of fever in which the patient suddenly falls down, as if from

concussion of the brain.—Bloodletting speedily restored him to the use of his faculties. High arterial reaction soon succeeded which in a few days subsided. Debility supervened and stimulants were used. The debility increased rapidly under the stimulating course. The pulse became small and feeble, the skin, and, particularly the extremities were cold. He was unable to articulate, or swallow fluids. The respiration was slow, difficult, and attended with heaving of the chest. Coma supervened, and he was thought to be dying. Stimulants were now discontinued. He remained in the same situation an hour or two, when he had a copious evacuation by stool. The pulse, before scarcely perceptible at the wrist, immediately rose, and became full and soft, with a warm skin. There was an accession of strength, and his breathing became free and easy. He sat up in his bed, and conversed rationally. Was the debility in this case real, or only apparent? If real, why was it not relieved by stimulants, and why removed by catharsis? If, then, the debility is not real, but only apparent, it must be owing to a state of partial suspension or obstruction of the functions of the brain and nerves, which obstruction or suspension, depends upon a broken balance of the circulation, and too great a determination to those organs. The chief indications, therefore, evidently are to remove those local determinations and morbid accumulations, which obstruct the functions of the brain and nervous system, restore an equilibrium of the circulation, and save important organs from disorganization.

It must not be supposed, that bloodletting is indicated only in those cases in which it is necessary to subdue immoderate arterial reaction. Were this the case it would generally be unnecessary, for we have other remedies that will *certainly* produce that effect. It is required on other and more urgent accounts. It is necessary for breaking up local determinations, preserving the integrity of functions, and preventing disorganization. And, notwithstanding the prejudice which still exists in the minds of the timid or the ignorant against its use, it must form the sheet anchor of hope in this Hercu-

lean disease—at least as it prevails at this time. It is evident that in a disease of such a violent and rapid career, in which serious, and, not unfrequently irreparable injury to important organs occurs so early, and the period during which remedies may be applied with much prospect of success, is of such short duration, those which are the most prompt and certain in the operation, are chiefly to be relied on. We are possessed of no remedy of equal efficacy with bloodletting in breaking up local determinations; and consequently none so powerful in restoring the functions of the brain and nervous system, and of promoting an equilibrium of the circulation and excitability. By removing those determinations to the brain and nervous system, which obstruct their functions, the pain and weakness of the lower extremities are relieved; the secretions are promoted; the torpor of the bowels, and that torpor of the portal circle which causes the blood to accumulate there, are removed or greatly relieved; and, not least in point of importance, the danger of disorganization and effusion in the brain is greatly lessened.

If bloodletting be freely used, immediately upon the approach of febrile symptoms, it seldom fails to prevent the disease. If employed during the forming stage, and before important organs have suffered much from the disease, it invariably renders the case mild and manageable; and, if used at any time during the first, or early in the second stage of the complaint it cannot fail to mitigate the violence of the symptoms, and increase the prospect of recovery. In such cases, it relieves the headache, delirium, pain in the back, pain and sickness at the stomach, torpor of the bowels, promotes perspiration and the secretions generally. It also relieves the difficulty of breathing, load and tension of the epigastrium, and, instead of increasing the debility, tends to remove the lassitude and sense of fatigue.

Bloodletting may be carried to a great extent, if used during the first, or early in the second stage; but the approach of the third stage, should always be the signal for laying aside the lancet. For when it is established, there is no excessive

reaction to subdue, and although the quantity of the circulating mass should be reduced, nature is to much enfeebled by the disease, to restore an equilibrium. Bloodletting under such circumstances will assuredly facilitate the approach of death. A good remedy is sometimes brought into discredit, by the timidity or ignorance of those who use it. It is not enough to know, that it is useful, but, it is necessary to understand the true principles of its application, as well as its *modus operandi*. It is, in deciding upon the time *when* and the manner *how*, that real talent unfolds itself; and distinguishes the man of science and skill from the blundering rotinist.—Bloodletting should be used *early* and *efficiently*, or not at all. I lately enquired of a practising physician, in this city, if he had found bloodletting useful in yellow fever, as it prevails at this time? He answered, that he had not. That he had used it in several cases, but the patients had all died. Astonished at a result so contrary to my own experience, and that of several other practitioners. I enquired how much they had been bled. He replied that in one instance (in which there seemed to have been more boldness displayed than in any other) the remedy had been carried to the extent of eight or ten ounces—*Eight or ten ounces of blood* at a time from a *single patient* in yellow fever! And the patient did not die, instanter, of depletion? Surely this was a great stretch of human courage! The abstraction of eight or ten ounces of blood, can have but little effect in a disease of such violence as yellow fever. Such feeble and inert practice, can have but little effect, except to bring into discredit, the best remedy that ever graced the pages of medicine.

Dr. Cartwright of Natchez took sixty ounces of blood at a time, from a yellow fever patient, and cured the disease. Dr. Rush frequently bled to the extent of ninety ounces, during the progress of a single case, with the happiest effect. He often bled five or six times, and one case is related, in which the patient was bled fourteen times.

Dr. Johnson (Endemic of Bengal) who always bled "boldly and decisively, until the head and precordia were relieved"

observes, that were he to "go over the same ground again he would try a *still more active* course of depletion by bloodletting and purging." In the present endemic I have usually taken from 30 to 60 ounces. The blood does not invariably exhibit the inflammatory buff, even if bloodletting be necessary. The buffy appearance may always be observed, if the blood has been taken while there was an increased velocity of the circulation. If a person be bled while in health, the blood does not at first exhibit the buffy coat; but if the operation be repeated, often in a short space of time, a subsequent bleeding will exhibit that appearance. By lessening the quantity of the circulating mass, the velocity of the blood is greatly increased, so that as in cases where the inflammatory diathesis prevails, the blood passes more frequently through the lungs, is more completely decarbonized and consequently has a greater capacity for caloric, cools more slowly and thereby gives the fibrin more time to separate and appear on the surface, and thus it exhibits the inflammatory buff. Early in the first stage of fevers, the velocity of the circulation is not increased, but lessened, in consequence of the congestive state of the brain and nervous system, and reaction not having been established. Therefore, if blood be taken at this time, it will not exhibit the buffy coat, although bloodletting be essentially necessary. The absence of the buffy appearance, in the first stage, is owing to a languid state of the circulation, from the congestion. But in the last stage, the same circumstance arises from a languid state of the circulation from exhaustion. Therefore, as the absence of the buff in the first stage indicates the necessity of the lancet, so the appearance in the last stage, forbids its use.

Cathartics.—After bloodletting, no time should be lost in procuring free evacuations from the bowels. For this purpose, I have usually exhibited from 50 to 60 grs. of calomel and followed it up by Epsom salt, or castor oil, regulating the dose and repetition by the state of the stomach, together with frequent enemas. From the great torpor of the bowels, large doses of medicine are commonly necessary to procure evacuation. Cathartics usually procure great relief from all the

symptoms, particularly if the stools are bilious. By promoting secretion from the bowels, they relieve the congestion of the portal circle. They also relieve the determination to the brain and nervous system; and thereby enable them to carry on the functions. Hence their influence in promoting secretions, from the liver, skin &c. of liberating the action of the heart and arteries, and of restoring warmth and activity to the surface and extremities. Frequently the physician is baffled in his efforts to procure catharsis by the exhibition of cathartics and enemas alone; in such cases, bloodletting, by relieving the congestive state of the brain and nerves, and particularly by its effect on the system of ganglionic nerves (which are always found inflamed after death) and the congestion of the portal circle, will powerfully assist our cathartic medicines. Upon the approach of the third stage, all copious evacuations should be carefully avoided.

Cold affusion is very powerful in subduing immoderate arterial reaction. It reduces the force and frequency of the pulse and relieves the pain in the head, back and extremities. A patient has been known to faint, from having a stream of cold water poured upon his head. It is also useful in promoting the secretions. But it is not so powerful in relieving congestions as bloodletting. It should be used as Dr. Currie has instructed us, only in those cases where the heat is steadily above the healthy standard, and there is no perspiration nor sense of chilliness present.

Alteratives.—In all fevers, but more especially in those of a malignant and inveterate character, the blood is hurried upon the brain and nervous system, obstructing or deranging the functions. The ganglionic system, which includes the secretory filaments for the abdominal viscera, as well as those which proceed more directly from the encephalon, are found diseased after death. This diseased state of the nerves, must necessarily derange the functions of the parts on which they are distributed. Hence the secretions from all the abdominal viscera are suppressed, increased in quantity or depraved in quality. In some instances, the secretion of bile is entirely suspended, none being found in the gall bladder after death.

At other times, it is increased in quantity, and depraved, consisting of a thin fluid or a thick dark coloured matter, different from healthy bile. The secretions from the bowels are also deranged. The stomach secretes an acrid matter, which corrodes and inflames its internal surface. The diseased state of the nerves also induces a torpor, and consequent congestion of the portal circle, which in its turn, serves to keep up the depraved, or suppressed state of the secretions. The skin likewise participates in this state of things. Its secretion is suppressed, or increased in quantity, depraved in quality and soon putrifies. Mercury has a *specific* action upon the glandular system, in promoting its various secretions when suppressed, and of correcting them when depraved. It infuses activity into that system. Those glands which are situated sufficiently superficial to be the subjects of observation, exhibit signs of increased action, such as tenderness and heat in their vicinity. If the surface and extremities were cold before, they become warm now, from the stimulus of the mercury upon their secretory organs. The blood circulates more freely to them. The brain and nervous system are consequently relieved, in some measure, of the congestions which obstruct their functions. The pulse becomes full and strong, and healthy secretions commence from the salivary glands, the skin, the liver, all the abdominal viscera. These evacuations serve further, to deplete and relieve congestions, while the activity diffused into every part of the glandular system, serves to promote that equilibrium in the circulation and excitability, in which health consists. But in some cases, the congestion of the brain and nervous system, so completely obstructs their functions, and renders the glandular system so torpid, that mercury will not procure secretions; but causes inflammation, ulceration, gangrene and sloughing from the mouth and throat. In such cases "pushing the mercurial treatment" without the proper preparatory measures, may do incalculable mischief by the irritation it causes. Bloodletting, cold affusions, cathartics, and emetics, when there is nothing to forbid their use, by relieving the determination to the brain and nervous system, serve to assist the calomel in

restoring the secretions. Unfortunately, too often the difficulty of procuring secretion is evident, only, in that stage in which bloodletting and other active evacuants, are inadmissible. The first and second stages, having passed by while the physician still had hopes of success; he discovers his mistake, when it is too late to apply an efficient remedy. This obstinate condition may generally be apprehended, however, when there are strong signs of determination to the brain and nervous system, or of great congestion of the viscera. In such cases, depletion is necessary to enable medicines to have their proper effect; and to save the organs which suffer most, from disorganization. In general, if active depletion be used early in the disease, very little need be apprehended from torpor of the glands, and calomel will seldom fail to procure secretion. In nearly every case that came under my observation, in which the patient was freely bled and purged early in the disease, calomel acted readily enough upon the glands.

Stimulants.—Those congestions which occur early in the disease, do not depend, primarily, upon a diminution of the force of the heart and arteries, but upon a broken balance of the circulation; whereby determinations to the brain and nervous system take place, and obstruct their functions. These primary congestions are, therefore, of a *sthenic* character, and frequently continue to the very close of the disease. In such cases the exhibition of internal stimulants gives no relief, but tends further to depress the pulse and strength. On the contrary, the patient always obtains relief from evacuants. Even when the debility is so great, and the disease so far advanced, that no rational hopes can be entertained of recovery, cathartics procure temporary relief, and an accession of strength. But not unfrequently, upon the approach of the third stage the congestions change their character; the force of the determinations which caused them, in the first stage, having been lessened, they depend for the most part upon debility of the arterial system, and the functions of the brain and nervous system having been impaired by previous local determinations. These are, therefore, *asthenic* congestions, and may be treated with stimulants both local and general. The

increased fullness and regularity of the pulse, soft perspirable state of the skin, warmth of the extremities, returning consciousness and reason, refreshing sleep, increase of strength, and the general improvement of the symptoms under its use, will show the propriety of its continuance; while on the contrary, a depressed pulse, stupor, delirium, dryness of the skin, restlessness, &c. supervening, should be the signal for laying them aside.

I forbear to say any thing relative to the various auxiliary remedies, usually adopted in the treatment of yellow fever; having nothing new to offer relative to them, and every practitioner knowing how to estimate their value.

REVIEWS AND BIBLIOGRAPHICAL NOTICES.

ART. XI.—THE PEOPLE'S DOCTORS.—*New Guide to Health; or Botanic Family Physician.* Containing a complete system of practice upon a plan entirely new; with a description of the vegetables made use of, and directions for preparing and administering them to cure disease. To which is added a description of several cases of disease attended by the Author, with the mode of treatment and cure. By SAMUEL THOMSON.—Horton Howard, Columbus, 1828. pp. 115.

A course of fifteen Lectures on Medical Botany, denominated Thomson's new theory of medical practice; in which the various theories that have preceded it, are reviewed and compared; delivered in Cincinnati, Ohio. By SAMUEL ROBINSON.—Horton Howard, Columbus, 1829.—pp. 200.

Cases of cures performed by the use of Swaim's Panacea. By WM. SWAIM, Philadelphia, 1827.—pp. 84.

The Pulmist; or Introduction to the Art of curing and preventing the Consumption or chronic Phthisis. A medical essay, including a new and better distinction of its causes, kinds, remedies, diets, and other peculiarities. By Professor RAFINESQUE, Ph. D. and Pulmist, Professor of Practical and Medical Botany, Natural and Civil History, &c. &c.—Philadelphia, 1829.

The Compleat English Physician, or, the Druggists Shop Opened.—Explicating all the particulars of which Medicines at this day, are Composed and made. Shewing their various Names and Natures, their several Preparations, Virtues, Uses and Doses as they are applicable to the whole Art of Physic, and containing above 600 Chymical processes.

A work of exceeding use to all sorts of Men, of what Quality or Profession soever. The *like* not hitherto extant.

In X. Books. Multa multumque. By WILLIAM SALMON, Professor of Physic. London. pp. 1207.—1693.

"THEY shall have mysteries—aye precious stuff
"For knaves to thrive by—mysteries enough;
"Dark tangled doctrines, dark as fraud can weave,
"Which *simple* votaries shall on *trust* receive,
"While *craftier feign belief*, till they believe."

ROBERTSON, the celebrated historian, expresses the opinion, that superstition 'was originally engrafted on medicine, not on religion.' However this may be, no one conversant with 'poor human nature,' can be unapprized of the close companionship which has always subsisted between them. In savage life, a belief in the healing efficacy of charms and incantations, is so universal, as to leave no doubt, that a principle of superstition is inherent in the human mind. It belongs, therefore, to man in every situation; though in civilized life its manifestations are comparatively few and feeble, for it is the tendency of all good education to limit its operations. Hence the most enlightened minds, display least propensity for the marvellous; but how can the intellect of a whole nation be cultivated on all subjects? This was never yet done, and we are sorry to add, never can be done. In despite of every exertion to illuminate the mass, many dark and impenetrable spots will remain; so that society, in its best composition, must continue to display enough of credulity to render it ridiculous. From the depths of ignorance, with its overshadowing superstitions,—when the hopes of the sick rest upon spells and coscinomancy,—the first step taken, is to blend with these *supernatural*, a variety of *natural* means, resting the efficacy of the latter, on the occult influence of the former. The next advance, leaves the mummeries of the sorcerer behind; but clings to amulets, seventh-sons, 'yarb-doctors,' and vagabonds. This brings us to our own age—than which, with all our boasted elevation in learning and philosophy, no other has ever presented a greater *variety* of barefaced and abominable quacke-

ries. To eradicate them would be more difficult, than to root out the sour dock and Canada thistle of our fields, while the soil continues to favour its reproduction. Planted in the ignorance of the multitude, warmed by its credulity, and cherished by their artful and unblushing authors, these impostures are fixed upon us, as the 'poison oak' encircles the trunk of the noble tree, whose name it has prostituted. True it is, they are not always the same. The stupidest intellect at last comes to perceive their absurdity, and throws them off; but the impostors—

'New edge their dulness and new bronze their face,'

and speedily invent fresh draughts for the gaping and thirsty populace.

When one of these quackeries is inoculated into a community, nothing can arrest its spread, or limit its duration. Every dog has its day, and so has every nostrum. The gulping is universal; not extending, it is true, to every individual, but to all classes. The propensity to be cheated is not confined to men or women, the old or young, the poor or rich, the unlearned, or (we are sorry to add,) the learned; but displays its workings in the weak-minded and credulous of all. Like the small pox it prevails till all the susceptible are infected, and have gone through the disease. A moment of common sense may, perhaps, succeed to the period of suffering; as natural fools have sometimes spoken well from the shock of a violent blow. The desire to be cheated, however, returns apace; but not earlier than the desire to cheat—

"Then thick as locusts dark'ning all the ground,
"A tribe, with herbs and roots fantastic crown'd,
"All with some wond'rous gift approach the people;
"—Lobelia, pulmel, and steam kettle."

A new excitement now springs up. A blue light, such as the superstitious see rising from the church yard, spreads over the people, and reveals the *ecstacy* of every vacant and credulous countenance. Now is the time for dyspeptics and asthmaticks and hypochondriacks. Give them but a single draught. O how delightful! Perchance a ladle full from the chaldron of Macbeth; but no matter. Administered by wizzard hands it can do no harm. Down with the profession, *vive la Charlatanerie.* The world has been long enough duped by lawyers, and priests, and doctors. Let us rid ourselves of the last of them, if no more. If not the greatest impostors,

they cheat us out of most money, and kill us to boot.—They bleed us to fainting, blister us to wincing, stupefy us with opium, vomit us with tartar instead of lobelia, salivate us with mercury, in place of the panacea, or the 'stone mason's balsam,' and, purge off with calomel all kinds of phlegm, but that which encumbers our brain! Let no one be over nice. The end sometimes justifies the means. Suffering humanity cries aloud, and must be rescued from the keeping of science and skill and professional charity. The world has been in error four thousand years; and the path of medicine may be followed back by the carcasses of its victims. *Doctor* Thomson, and *doctor* Swaim, and *doctor* Rafinesque have received new 'gifts,' and are ready to distribute them. Push aside the 'riglar' Doctors!—Conceal all their cures, and publish all their failures! Go among their patients, and labour to overthrow a long established confidence! Brand them with ignorance of the human system! Stigmatize them with cruelty! Denounce them as mercenary! and Libel them as infamous! Break down the *aristocrasy* of learning and science: Give the people their rights: let the drunken and lazy among the tailors, and carpenters, and *lawyers*, and coblers, and *clergy*, and saddlers, and ostlers, now rise to the summit level, and go forth as ministering angels! Become their patrons, and snuff up in turn the *steams* of their incense; sustain them against the professed Doctors; lecture them into notoriety: mould them into form as the bear licks her shapeless pups into beauty: turn jackals and procurers lest they might want business: stand responsible for their success: newspaper abroad their pretended cures; and handbill away the proofs of their murders! This being done—

"The dawn will break upon us, and bright day shall go forth and shine; when we may hope to live with the dear objects of our love, until ripe and full of years, we shall be gathered to our fathers."
Robinson's Lect. ix.

But we must withdraw from the view of these ravishing prospects, to examine some of the objects which lie in the foreground of the picture.

We need not tell our readers, that the mountebanks who are to bring about the aforesaid millenium; generally work on *patent* methods. This is indispensable to success—both in curing the sick, and getting the sick willing to be cured. It is edifying to see, how much of dignity and mystery are impressed on the vilest or the vapidest compound, by the great seal of state! Oh! to take medicine 'by authority' and that, too, of

the President, who would recommend nothing that he had not tried on himself, and found useful for the people. He is the people's friend. He is a good doctor (not from 'book-larnin') but common sense; he once made a *great speech* in Congress, and that shows that he is a great *doctor*! before that he was a great *lawyer*, and of course is a great *doctor!* he fought a great *battle*, and is therefore a great *doctor!* It is a crafty error of the 'riglar' doctors, that a man should study their books to know how to cure diseases; for this knowledge, like 'reading and writing, comes by natur.' Let us stick then to the patents—they are 'genuine,' and contain no 'marcury.' Such is the fanaticism inspired in the multitude by the diplomas issued by the office at Washington! To trace out all its consequences, would carry us to the charnel house, which at the present moment, we do not feel inclined to enter. But what will the fanatics think, when we tell them, that neither the president, nor the secretary, nor even good old Dr. Thornton himself, ever ventured to swallow one of these precious boluses or pills, the 'panacea,' 'catholicon,' or 'pulmel;' 'skunk cabbage,' 'number 6,' 'clover heads,' or 'cayenne'—except when they have added the last to their roast beef, or turtle soup? We fear they can scarcely believe us, credulous as they are; but still such is the mortifying fact. The whole process for the invention, patenting, selling, and killing off by means of these preparations, may be stated in a few words. Pick up a physician's recipe for 'antibilious pills,' 'stomachic bitters,' or 'diaphoretic powders'—or, if you should have been so fortunate as to be an apothecary's apprentice, or bookkeeper for a doctor, and have thus acquired the knowledge that will enable you to frame some compositions for yourself; in either case, apply to the patent office, and swear upon your *voire dire*, that you do *verily believe, that you are the true inventor or discoverer* of such compounds; whereupon a patent will issue, authorizing you to sell out for the 'benefit of the afflicted,' that of which the president knows about as much as Charles I. knew or possessed of the American continent, when he granted letters patent to Mr. Saybrook, for a slip of country from Long Island Sound to the Pacific ocean.

But let us turn from the *patentees* to the *patentors*; and inquire by what authority they grant letters for the cure of diseases.

By the statute of 1793, it is provided that—

"When any person or persons, being a citizen or citizens of the United States, shall allege that he or they have invented any new and

useful art, machine, manufacture, or composition of matter, or any new and useful improvement on any art, machine, manufacture, or composition of matter, not known or used before the application, and shall present a petition to the secretary of state signifying a desire of obtaining an exclusive property in the same, and praying that a patent may be granted therefor, it shall and may be lawful for the said secretary of state to cause letters patent to be made out, in the name of the United States, bearing teste by the president of the United States."—*Ingersoll's Digest.* p. 656.

Now not one word is here said by the law, about drugs or medicines, or cures, or quack doctors; and we seriously doubt, whether the framers of the law ever contemplated an extension of its exclusive privileges, to the preparation and administration of remedies for the sick. The phrase 'composition of matter' evidently refers to the arts. Such obviously is and should be its meaning, for what can be more preposterous than a patent method of curing diseases; when not one of the whole catalogue, can be cured by the exhibition of any single medicine. A man would be entitled to the 'copy right,' a species of patent, for a chart of the Mississippi, by which a steam boat might be safely run from New Orleans to Louisville; but not a patent right for managing the boat on such a voyage. So, a chemist would be entitled to a patent for the discovery and preperation of Epsom salt or the sulphate of quina; but not for its exclusive application to the cure of diseases. If a man should discover the existence of aloes and rhubarb and ipecac, in plants which has not hitherto afforded them, he might fairly claim from the government the exclusive right to extract them from such plants. But these substances, by varying their proportions, may be formed into a hundred different kinds of pills, adapted in judicious hands, to a hundred different states of morbid action, though not *necessarily* a cure for any. How preposterous, then, to grant letters patent, for one of a series of compositions, that might be multiplied *ad infinitum!* But the patenting system, in its practical operation does not stop at this. A single composition will not do. This could not be offered as an infallible cure, for more than some twenty or thirty incurable maladies. Let the patents then be multiplied to 'No. 6' or upwards; print your directions accordingly, and let the retailers visit the sick daily and drench them *secundum artem, novem vel nigrum*: Thus under the *federal* patent you come to practise physic, the state laws to the contrary notwithstanding. Such is the origin of the Thomsonian or steam quackeries, which are the reigning epidemic of the day. That all who thus occupy themselves, do it in violation of the laws regulating the

practice of medicine, and are obnoxious to their penalties, we have not a single doubt; but when our judges and legislators turn 'steam doctors,' and leave off butchering the constitution of the state, to butcher the constitutions of their fellow citizens, it would be credulous in the extreme, to believe that the statute against quackery is any thing more than a dead letter.

But it is time to enter on the review of the important works prefixed to the head of this article.

Of these books, the first is by *doctor* Thomson, who has favored the public—(that is such part of them as have the good sense to pay twenty dollars for a patent right) with an engraved likeness of himself, which we commend to the amateurs. The first 30 pages are composed of interlarded sketches, of the author's birth, labours and persecutions; of warnings to the good people against the 'regular faculty,' and of his system of physiology, pathology and therapeuticks. As most of the people are no doubt ignorant on all these important points, we shall make such extracts as the occasion seems to require.

"There are three things which have in a greater or less degree, called the attention of men, viz: Religion, Government, and Medicine. In ages past, these things were thought by millions to belong to three classes of men, Priests, Lawyers and Physicians. The Priests held the things of religion in their own hands, and brought the people to their terms; kept the scriptures in the dead languages, so that the common people could not read them. Those days of darkness are done away; the scriptures are translated into our own language, and each one is taught to read for himself. Government was once considered as belonging to a few, who thought themselves "born only to rule." The common people have now become acquainted with the great secret of government; and know that "all men are born free and equal," and that magistrates are put in authority, or out by the voice of the people, who choose them for their public servants.

While these, and many other things are brought where "common people" can understand them; the knowledge and use of medicine, is in a great measure concealed in a dead language, and a sick man is often obliged to risk his life, where he would not risk a dollar; and should the apothecary or his apprentice make a mistake, the sick man cannot correct it, and thus is exposed to receive an instrument of death, instead of that which would restore him to health had he known good medicine.

"It may be alleged, (said Dr. Buchanan,) that laying medicine more open to mankind, would lessen their faith in it. This indeed would be the case with regard to some; but it would have a quite contrary effect upon others. I know many people have the utmost dread and horror of every thing prescribed by a physician, who will nevertheless, very readily take a medicine which they know, and whose qualities they are in some measure acquainted with."

"Nothing ever can, or will inspire mankind with an absolute con-

fidence in physicians, but by their being open, frank, and undisguised in their behaviour."

"The most effectual way to destroy quackery in any art or science, is to diffuse the knowledge of it among mankind. Did physicians write their prescriptions in the common language of the country, and explain their intentions to the patient, as far as he could understand them, it would enable them to know when the medicine had the desired effect; would inspire him with absolute confidence in the physician; and would make him dread and detest every man who pretended to cram a secret medicine or poison down his throat."

It is true that much of what is at this day called medicine, is deadly poison; and were people to know what is offered them of this kind, they would absolutely refuse ever to receive it as a medicine. This I have long seen and known to be true; and have labored hard for many years to convince them of the evils that attend such a mode of procedure with the sick; and have turned my attention to those medicines that grow in our own country, which the God of nature has prepared for the benefit of mankind. Long has a general medicine been sought for, and I am confident I have found such as are universally applicable in all cases of disease, and which may be used with safety and success, in the hands of the people.

After thirty years study and repeated successful trials of the medicinal vegetables of our country, in all the diseases incident to our climate; I can, with well grounded assurance, recommend my system of practice and medicines to the public, as salutary and efficacious."

It must be a matter of national pride, that if Germany produced a Luther and England a Bacon, America has sent up from its humblest walks, a self-taught and gifted Thomson, who has done for medicine what those eminent men achieved for religion and philosophy. But let us proceed:

"Possessing a body like other men I was led to enquire into the nature of the component parts of what man is made. I found him composed of the four elements—Earth, Water, Air and Fire. The earth and water I found were the solids; the air and fire the fluids. The two first I found to be the component parts; the two last kept him in motion. Heat, I found was life; and Cold, death. Each one who examines into it will find that all constitutions are alike. I shall now describe the fuel which continues the fire, or life of man. This is contained in two things—food and medicines; which are in harmony with each other; often grow in the same field to be used by the same people. People who are capable of raising their food and preparing the same, may as easily learn to collect and prepare all their medicines and administer the same, when it is needed. Our life depends on heat; food is the fuel that kindles and continues that heat. The digestive powers being correct, causes the food to consume; this continues the warmth of the body, by continually supporting the fire.

The stomach is the deposit from which the whole body is supported. The heat is maintained in the stomach by consuming the food; and all the body and limbs receive their proportion of nourishment and heat from that source, as the whole room is warmed by the fire which is consumed in the fire place. The greater the quantity of wood consumed in the fire place, the greater the heat in the room. So in the

body; the more food, well digested, the more heat and support through the whole man. By constantly receiving food into the stomach, which is sometimes not suitable for the best nourishment, the stomach becomes foul, so that the food is not well digested. This causes the body to lose its heat—then the appetite fails; the bones ache and the man is sick in every part of the whole frame."

On these momentous speculations we shall not hazard a single remark. Still less shall we risk a comment on the noble effusion of original genius which followeth:—

"It has been acknowledged, even by those who are unfriendly to me and my practice, that my medicine may be good in some particular cases, but not in all. But this is an error. For there are but two great principles in the constitution of things, whether applied to the mind or body; the principle of life and the principle of death. That which contains the principle of life can never be tortured into an administration of death. If then a medicine is good in any case, it is because it is agreeable to nature, or this principle of life, the very opposite of disease. If it is agreeable in one case, it must be absolutely so in all."

The following extract will no doubt impart much consolation and quiet of conscience, to some of the regular faculty. It would be ill-natured to assign the reason:

"It is true that the study of anatomy, or structure of the human body and of the whole animal economy, is pleasing and useful; nor is there any objection to this, however minute and critical, if it is not to the neglect of first great principles, and the weightier matters of knowledge. But it is no more necessary to mankind at large, to qualify them to administer relief from pain and sickness, than to a cook in preparing food to satisfy hunger and nourishing the body. There is one general cause of hunger and one general supply of food; one general cause of disease and one general remedy. One can be satisfied, and the other removed, by an infinite variety of articles, best adapted to those different purposes--That medicine, therefore, that will open obstruction, promote perspiration, and restore digestion, is suited to every patient, whatever form the disease assumes, and is universally applicable. And acute disorders, such as fevers, cholics, and dysentary, may be relieved thereby, in twenty-four or forty-eight hours, at most."

But we must come to particular diseases:

"No person ever yet died of a fever! for as death approaches, the patient grows cold, until in death, the last spark of heat is extinguished. This, the learned doctors cannot deny; and as this is true, they ought, in justice, to acknowledge that their whole train of depletive remedies, such as bleeding, blistering, physicing, starving, with all their refrigeratives; their opium, mercury, arsenic, antimony, nitre, &c. are so many deadly engines, combined with the disease, against the constitution and life of the patient. If cold, which is the commonly received opinion, (and which is true,) is the cause of fever, to

repeatedly bleed the patient and administer mercury, opium, nitre, and other refrigerents to restore him to health, is as though a man should, to increase a fire in his room, throw a part of it out of the house, and to increase the remainder, put on water, snow and ice!"

The figurative style of the next paragraph must excite a general regret, that our author had not taken to the trade of poetry instead of medicine:

"Having described the two kinds of fever which are the most alarming, they being most fatal, I shall pass over those of a less alarming nature, and merely observe, that there is no other difference in all cases of fever, than what is caused by the different degrees of cold, or loss of inward heat, which are two adverse parties in one body, contending for power. If the heat gains the victory, the cold will be disinherited and health will be restored: but, on the other hand, if cold gains the ascendancy, heat will be dispossessed of its empire, and death will follow of course. As soon as life ceases, the body becomes cold, which is conclusive evidence that its gaining the victory is the cause of death. When the power of cold is nearly equal to that of heat the fever or strife between the two parties, may continue for a longer or shorter time, according to circumstances; this is what is called a longer fever, or fever and ague. The battle between cold and heat will take place periodically, sometimes every day, at other times, every other day, and they will leave off about equal, heat keeping a little the upper hand."

Again:—

"Much has been said by the doctors concerning the turn of a fever, and how long a time it will run. When it is said that a fever will turn at such a time, I presume it must mean that it has been gone; this is true, for it is then gone on the outside, and is trying to turn again and go inside, where it belongs. Instead of following the dictates of nature and aiding it to subdue the cold, the doctor uses all his skill to kill the fever. How, would I ask, in the name of common sense, can any thing turn when killed! Support the fever and it will return inside; the cold, which is the cause of disease, will be driven out, and health will be restored. In all cases called fever, the cause is the same in a greater or less degree, and may be relieved by one general remedy. The cold causes canker, and before the canker is seated the strife will take place between cold and heat; and while the hot flashes and cold chills remain, it is evidence that the canker is not settled, and the hot medicine alone occasionally assisted by steam, will throw it off; but as the contest ceases, the heat is steady on the outside; then canker assumes the power inside; this is called a settled fever. The truth is, the canker is fixed on the inside and will ripen and come off in a short time, if the fever is kept up so as to overpower the cold. This idea is new and never was known until my discovery. By raising the fever with Nos. 1 and 2, and taking off the canker with No. 3, and the same given by injections, we may turn a fever when we please; but if this is not understood, the canker will ripen and come off itself, when the fever will turn and go inside and the cold will be driven out; therefore they will do much better without a doctor than

with. The higher the fever runs, the sooner the cold will be subdued; and if you contend against the heat, the longer will be the run of the fever, and when killed, death follows.

When a patient is bled, it lessens the heat and gives double power to the cold; like taking out of one side of the scale and putting it in the other, which doubles the weight, and turns the scale in favor of the disease. By giving opium it deadens the feelings; the small doses of nitre and calomel tend to destroy what heat remains, and plants new crops of canker, which will stand in different stages in the body, the same as corn planted in the field every week, will keep some in all stages; so is the different degrees in canker. This is the reason why there are so many different fevers as are named; when one fever turns another sets in and so continues one after another until the harvest is all ripe, if the season is long enough: if not, the cold and frost takes them off—then it is said they died of a fever. It might with as much propriety be said that the corn killed with frost, died with the heat. The question, whether the heat or cold killed the patient, is easily decided, for that power which bears rule in the body after death is what killed the patient, which is cold—as much as that which bears rule when he is alive is heat. When a person is taken sick, it is common to say, I have got a cold and am afraid I am going to have a fever; but no fears are expressed of the cold he has taken; neither is it mentioned when the cold left him. The fashionable practice is to fight the remains of heat till the patient dies, by giving cold the victory; in which case, is it not a fact that the doctor assists the cold to kill the patient? Would it not have been more reasonable, or likely to have cured them, when the fever arose to throw off the cold, to have helped the fever and give nature the victory over its enemy, when the health would be restored the same as before they took the cold."

Against this acute and edifying extract, we should hardly be so imprudent as to run a tilt. Perhaps *doctor* Potter or *doctor* Swaim may take the subject up.

Orator Robinson informs us, that *doctor* Thomson's system made a very favorable impression on the mind of Dr. Rush. Now we wonder what that eminent advocate of the lancet must have thought of the following:—

"The practice of bleeding for the purpose of curing disease, I consider most unnatural and injurious. Nature never furnishes the body with more blood than is necessary for the maintenance of health; to take away part of the blood, therefore, is taking away just so much of their life, and is as contrary to nature, as it would be to cut away part of their flesh. Many experiments have been tried by the use of the lancet in fevers: but I believe it will be allowed by all, that most of them have proved fatal; and several eminent physicians have died in consequence of trying the experiment on themselves. If the system is diseased, the blood becomes as much diseased as any other part; remove the cause of the disorder and the blood will recover and become healthy as soon as any other part; but how taking part of it away can help to cure what remains, can never be reconciled with common sense."

The following paragraph must be a sore application to our friend Dr. Daniell, of Savannah, who proposes to cure almost all fevers by sinapisms:—

"There is no practice used by the physicians that I consider more inconsistent with common sense, and at the same time more inhuman, than blistering to remove disease; particularly insane persons or what the doctors call dropsy on the brain; in which cases, they shave the head and draw a blister on it.—Very few patients if any ever survive, this application. What would be thought if a scald should be caused by boiling water to remove disease? Yet there is no difference between this and a blister made by flies. I have witnessed many instances where great distress and very bad effects have been caused by the use of blisters; and believe I can truly say, that I never knew any benefit derived from their use. It very frequently causes stranguary, when the attempted remedy becomes much worse than the disease."

But it is time to enter the steam bath. Here the *doctor* is quite at home; and when at home does least harm to his patients.

"Steaming is a very important branch of my system of practice, which would in many cases without it, be insufficient to effect a cure. It is of great importance in many cases considered by the medical faculty as desperate; and they would be so under my mode of treatment, if it was not for this manner of applying heat to the body, for the purpose of reanimating the system and aiding nature in restoring health. I had but little knowledge of medicine, when through necessity, I discovered the use of steaming, to add heat or life to the decaying spark; and with it I was enabled, by administering such vegetable preparations as I then had a knowledge of, to effect a cure in cases where the regular practitioners had given them over.

The method adopted by me, and which has always answered the desired object, is as follows--Take several stones of different sizes and put them in the fire till red hot, then take the smallest first, and put one of them into a pan or kettle of hot water, with the stone about half immersed—the patient must be undressed and a blanket put around him so as to shield his whole body from the air, and then place him over the steam. Change the stones as often as they grow cool, so as to keep up a lively steam, and keep them over it; if they are faint, throw a little cold water on the face and stomach, which will let down the outward heat and restore the strength—after they have been over the steam long enough, which will generally be about 15 or 20 minutes, they must be washed all over with cold water or spirits and be put in bed, or may be dressed, as the circumstances of the case shall permit."

The *originality* of this method certainly entitled it to a patent.

The next 40 pages of our author, are devoted to the natural and pharmaceutic history of his materia medica. His hopes rest upon *lobelia inflata*, *cayenne pepper*, *ginger*, *black pep-*

per, bayberry, white pond lilly, the hemlock tree, rosemary, sumach, witch hazle, raspberry, squaw weed, balmony, pop ar bark, barberry, bitter root, goldenseal, peach meats, cherry stones, myrrh, spirit of turpentine, camphor, and lady's slipper; but he has, condescendingly, added the names of some thirty or forty more, among which we observe *elecampane, yellow dock, summersarosy,* and other *new* discoveries.

Now come the 'preparations and compositions.' These run through Nos. 1, 2, 3, 4, 5, & 6, besides 'nerve powder,' 'cough powder,' and 'vegetable powder,' with plasters and ointments.

'No. 1.' Comprehends the preparations of lobelia—'No. 2.' of cayenne pepper—'No. 3.' of bayberry, pond lily and hemlock—'No. 4.' of the bitters—'No. 5.' of poplar bark, bayberry, peach meats and cherry stones—'No. 6.' (rheumatic drops) of myrrh, cayenne and brandy. Nerve powder is composed—but we really beg to be excused from prosecuting this branch of the subject any further; and shall wind up with the following momentous information to our patients generally.

"STOCK OF MEDICINE FOR A FAMILY.

1 oz. of the Emetic Herb,
2 ozz. of Cayenne,
1-2 lb. Bayberry root bark, in powder,
1 lb. of Poplar bark,
1 lb. of Ginger,
1 pint of the Rheumatic Drops.

"This stock will be sufficient for a family for one year, and with such articles as they can easily procure themselves when wanted, will enable them to cure any disease, which a family of common size may be afflicted with during that time. The expense will be small, and much better than to employ a doctor and have his extravagant bill to pay.

In immediate connexion with the *doctor's* medicine chest, we shall place his directions for what he calls a regular course of medicine, which is the *new method* of curing *all* diseases.

"As I have frequently mentioned a regular course of medicine, I will here state what is meant by it, and the most proper way in which it is performed. Firstly, give No. 2 and 3, or composition, adding a tea-spoonful of No, 6; then steam, and when in bed repeat it, adding No. 1, which will cleanse the stomach and assist in keeping up a perspiration; when this has done operating, give an injection made with the same articles. Where there are symptoms of nervous affection, or spasms, put half a tea-spoonful of the nerve powder into each dose given, and into the injection. In violent cases, where immediate relief is needed, Nos. 1, 2, 3, and 6, may be given together. Injections may be administered at all times and in all cases of disease to advan-

tage; it can never do harm, and in many cases, they are indispensably necessary, especially where there is canker and inflammation in the bowels, and there is danger of mortification, in which case, add a tea-spoonful of No. 6. In cases of this kind, the injection should be given first, or at the same time of giving the composition, or No. 3."

In this way the *doctor* proposes, as we have said, to cure nearly all diseases. Let us take a few examples from the back of his book:—

MEASLES.

"This disease is very common, especially among children, and is often attended with bad consequences, when not properly treated. It is a high state of canker and putrefaction; and if the determining powers are kept to the surface, it will make its appearance on the outside, and go off itself; but if cold overpowers the inward heat, so as to turn the determining powers inward, the disease will not make its appearance, and the patient will become much distressed, frequently producing fatal consequences, if some powerful stimulant is not administered to bring the disorder out. To give physic in cases of this kind is very dangerous, as it strengthens the power of cold and keeps the canker and putrefaction inside, which sometimes seats upon the lungs and causes consumption; or turns to the stomach and bowels, when they die suddenly, as has been the case with hundreds, for a few years past. I have attended a great many cases of the measles in the course of my practice, and never lost one; and never have known of any that have died of this disorder, who were attended by any of my agents. When the symptoms make their appearance, give a dose of the composition powder, or of No. 2; then give the tea of No. 3, to guard against canker, and add some No. 2, to overpower the cold; and when the second dose is given, add No. 1, to clear the stomach and promote perspiration; as soon as this takes place, the disorder will show itself on the outside. By continuing to keep the determining power to the surface, nature will take its regular course, and the disease will go off without injuring the constitution. If the bowels appear to be disordered, give an injection; and be careful to keep the patient warm."

SMALL POX.

"This disease is the highest state of canker and putrefaction, which the human body is capable of receiving, and is the most contagious, being taken in with the breath, or may be communicated by inoculation, in which case it is not so violent and dangerous as when taken in the natural way. The distressing and often fatal consequences that have happened in cases of the small pox, are more owing to the manner in which it has been treated than to the disease. The fashionable mode of treatment in this disease has been to give physic, and reduce the strength, by starving the patient and keeping them cold. This is contrary to common sense, as it weakens the friend and strengthens the enemy; and the same cause would produce similar effects in any other disorder. All that is necessary is to assist nature to drive out the canker and putrefaction, which is the cause of the disease, by keeping the determining powers to the surface, in which case there will be no danger. The same manner of treatment should be used in

this complaint as has been directed for the measles. The canker-rash, and all kinds of disease that a person is not liable to have but once, such as chicken-pox, swine-pox, &c. are from the same cause and must be treated in a similar manner."

CONSUMPTION.

"This complaint is generally caused by some acute disorder not being removed, and the patient being run down by the fashionable practice, until nature makes a compromise with disease, and the house becomes divided against itself. There is a constant warfare kept up between the inward heat and cold, the flesh waters away in consequence of not digesting the food, the canker becomes seated on the stomach and bowels, and then takes hold of the lungs. When they get into this situation it is called a seated consumption, and is pronounced by the doctors to be incurable. I have had a great many cases of this kind and have in all of them, where there was life enough left to build upon, been able to effect a cure by my system of practice. The most important thing is to raise the inward heat and get a perspiration, clear the system of canker, and restore the digestive powers, so that food will nourish the body and keep up that heat on which life depends. This must be done by the regular course of medicine, as has been directed in all violent attacks of disease, and persevering in it till the cause is removed.

This complaint is called by the doctors a hectic fever, because they are subject to cold chills and hot flashes on the surface; but this is an error, for there is no fever about it; and this is the greatest difficulty—if there was it would have a crisis and nature would be able to drive out the cold and effect a cure; the only difficulty is to raise a fever, which must be done by such medicine as will raise and hold the inward heat till nature has the complete command, When the patient is very weak and low, they will have what is called cold sweats; the cause of this is not understood; the water that collects on the skin does not come through the pores, but it is attracted from the air in the room, which is warmer than the body, and condenses on the surface; the same may be seen on the outside of a mug or tumbler on a hot day, when filled with cold water, which is from the same cause. It is of more importance to attend to the preventing of this complaint than to cure it. If people would make use of those means which I have recommended, and cure themselves of disease in its first stages, and avoid all poisonous drugs, there would never be a case of consumption or any other chronic disorder."

We owe an apology perhaps to the readers of the Western Journal, for so an extended a notice of the '*New Guide to Health.*' So long as its circulation was confined to the grossly ignorant, no journalist could be excused for noticing its thousand and one fooleries. But it is not at present limited to the vulgar. Respectable and intelligent mechanicks, legislative and judicial officers, both state and federal, barristers, ladies, ministers of the gospel, and even some of the medical profesion,

"Who hold the eel of science by the tail,"

have become its converts and puffers.

"The dog star rages and beyond a doubt
"All bedlam or parnassus is let out."

At such a critical stage of the disorder, it seems proper, that the faculty should know something of its causes, and this we have sought to communicate.

We shall for the present dismiss this artful demagogue and mischievous impostor, with the following reflections, in which every honorable and intelligent member of the profession, will concur.

1. His success in acquiring popularity, is in no small degree attributable to his railings against the educated physicians.

2. By presenting what he calls a system of principles, to those who cannot perceive their absurdity, he acquires their confidence.

3. Whatever may be found of physiology or pathology in his book, has been picked up from the popular works on medicine.

4. His remedies consist of plants long known to the profession; many of them now in use, and others rejected as inert after repeated trials. Even his boasted lobelia has been known and used as a medicine, by the physicians for 30 years.

5. The steam bath with the subsequent application of cold water, has been used in all ages and among all people. It is well known to be a favorite remedy with our North American Indians, from whom Thomson adopted his manner of applying it. Of all his remedies this is perhaps at once the most harmless and the most efficacious.

6. Most of the medicines on which he relies are active stimulants and may, therefore, cure the diseases to which that class of remedies are adapted; while they produce the most fatal effects, in maladies of an inflammatory character, for which they are invariably used. Of this several examples have fallen under our own observation, and cases have been communicated to us from all quarters. Herein lies the abuse, which calls for the interposition of the faculty. If their friends and patients, while the delusion rages, will not listen to what they say, it is not the less their duty to speak. The consciousness of having rescued but a single credulous victim from his impending fate, should, with a physician of humanity, outweigh a thousand ungenerous insinuations against the motives which governed him.

8. There is nothing original, in the union of emetics with sweating and heating medicines. From time immemorial,

taking a vomit and then a composing draught, drinking hot tea, and bathing the feet in hot water, so as to take a good sweat, is a practice that has prevailed in the profession, and among the people. It was reserved for one *Samuel Thomson* to take out a patent, for a clumsy and often dangerous method, of arriving at the *very same result*; and thus to become, in the eyes of the weak-minded and superstitious, one of the greatest geniuses and benefactors of the human race! Why does not some one get out a patent, for preventing the small pox by vaccinating on the nose, instead of the arm? It might be averred, that it would not, *then*, be necessary to repeat the operation every seven years, or oftener if a man moved from one town to another. Such vaccinations might be as effectual as those in the arm, and could be referred to and published—not as testimony in favour of the *Cow-pock*, but in favour of inserting it in the 'end of the snout.' Thus in a short time we should find half the community—(we mean half in point of numbers,) turning up their noses at their incredulous and bigotted brethren, who might prefer to have the carbuncle on their arms.

7. Intelligent and candid men, not of the medical profession, ought to be apprized, that the strong medicines are not confined to the mineral kingdom; but that the greatest poisons are of vegetable origin, and the number not a few. Even prussic acid, the deadliest poison ever discovered, may be distilled from *doctor* Thomson's *peach meats* and *cherry stones*.

9. Lastly, we might apply to the whole Thomsonian farrago of doctrines and recipies, the remark which Blumenbach is said to have made upon phrenology—'That which is true is not new; and that which is new is not true.'

Such being the character of the *system* under review, we cannot forbear to express our surprise and sorrow, that it should have found a public advocate in the reverend author of the *Fifteen Lectures*. That a clergyman of reputed piety, learning, genius and eloquence, could be found to lend himself to the propagation of such stupid and dangerous quackeries, originating with one of the most illiterate and indolent men in society, could not have been anticipated: That he would labor to hide their deformities behind the veil of his polished elocution, is a prostitution of his talents: That he could stand up and decry a profession, which has long been closely associated with his own; declaim against *regular* studies; and level the battering ram of his wit against a superstructure, erected by ages of toil in the dearest interests of humanity, does little credit to his feelings: That he would

ransack encyclopædias and digests, to acquire a smattering of medical theories, and artfully interweave them with the nonsense of a ridiculous, but mischievous empyricism, gives but poor indication of his rectitude: That he should garnish the whole with texts of scripture, and attempt to give to heresy in medicine, a dangerous passport to the confidence of the religious community, by blending it with sentiments of devotion, argues still less for his piety:—and yet all this and more has been done by the reverend, author before us.

Let us look at a few specimens:—

"Animal life, as it operates on the human body in health and in disease, has been considered the primary and grand object of the attention of the physician. And some of its most oovious properties are sensibility, irritability, and excitability. These are the *effects* of vitality, which have been mistaken for *vitality* itself.

Some physicians have supposed that the vital principle may lie dormant in a quiescent state, like *latent* heat, and afterwards be made to shew itself, like heat, by the application of stimuli. But the reasoning is fallacious; it is merely analogical—drawn from a material subject, *heat*, to prove the phenomena of an immaterial subject—the *spirit* of life. It would be better reason, to attempt to prove that the spirit is *latent*, when the body is dead, because we cannot perceive its effects; than to attempt to establish from latent *heat*, a latent state of mind. For if in fainting, or catalepsy, it can be established that the spirit is merely latent—it may as well be latent in the grave to the day of judgment: for in the argument respecting an immaterial *substance*, whose very essential quality is *activity*—and without which it could not be—the *latency* of *one* hour, or *one hundred thousand millions*, could not at all change the conditions of the question; nor relieve the disputant from the direful consequences of making the soul a material *substance*.

I know some physicians distinguish between the rational soul and the vital principle of animal life. But the distinction is, perhaps, not clearly understood. There is in animals something far superior to mere vitality. A *plant* has *vitality*—its *life* and *death*. And Dr. Brown's theory was applied, with great success, to plants; and supported them with superior energy and vigor, in the high latitudes of Scotland! But in animals, besides vitality, we perceive *thought*, *reason*, *memory*, *design*, and *perseverance*, with a great number of the noble passions which animate man—*love*, *gratitude*, *affection*, *friendship*, *grief* and *bitter woe*, even to the destruction of life.

A very eminent and pious philosopher, considered these phenomena, as the operation and agency of God, moving and directing his own universe to the final *issue* and grand results of the eternal Judgment. This, by the way, is a very old opinion, and has been beautifully embodied by the poet, in these celebrated lines:

"All are but parts of one stupendous whole,
Whose body, *nature* is, and God the soul:
That, chang'd through all, and yet in all the same,
Great in the earth as in the etherial frame;
Lives in the sun, refreshes in the breeze,
Glows in the stars, and blossoms in the trees;

Lives through all *life*, extends through all extent,
Spreads undivided, operates unspent;
Breathes in our soul, informs our mortal part,
As full, as perfect, in a hair as heart;
As full, as perfect, in vile man that mourns,
As the rapt seraph that adores and burns.
To him no high, no low, no great, no small;
He fills, he bounds, connects, and equals all!"

This is not the doctrine of SPINOZA, who made God the *soul* of the world; but the pious doctrine of a universal providence, and the omnipresence of the Deity in the government of the world. Look at the smallest plant or insect, you behold him there, in his matchless wisdom and sustaining power—forming the mechanism and moving the vitality of a creature so small and inconsiderable, and apparently worthless in the great sum of things. The Psalmist took a most striking and comprehensive view of this sublime and glorious theme. "Whither shall I go from thy spirit? Or whither shall I flee from thy presence? If I ascend up into heaven, thou art there! If I make my bed in hell, behold thou art there!! If I take the wings of the morning, and dwell in the uttermost parts of the sea, even there shall thy hand lead me, and thy right hand shall hold me. If I say surely the darkness shall cover me, even the *night* shall be light round about me!"

This was the true sentiment and doctrine of the ancient philosophers—the presence and superintendance of the Deity every where. They were not Atheists—although the miserable SPINOZA wrested their doctrine to his own malignant and deadly purpose. But he might well do that, when he turned the Jewish Scripture to the same account—for he was a Jew, and deeply read in the old testament. But the *wasp* can extract poison from the flower: So did his perverted *soul* draw death from the wells of salvation!

As the doctrine of *life* and *health* cannot be known by reasoning *a priori;* but must be deduced from experience and observation, some very eminent men have thought that its laws and principles should be divided in a different manner from that of the scholastic mode: That so many divisions of the theory of life and disease, which have prevailed since the days of GALEN, have not only embarrassed but bewildered the subject; and that the laws and principles, therefore, should be divided in a different manner—1st, that the human blood is the recipient and vehicle of heat and life to the several parts; 2d, from many experiments, *pure air* appears to be the pabulum of irritability; for the absence of pure air destroys life sooner than the defect of any other natural *substance*; 3d, the next in importance to the animal economy, seems to be the nervous fluid, or the medulla of the brain and spinal marrow; for they have all the same nature and origin; 4th; sensibility, residing in the organ of sense, connecting the mind with the external world.

All this is very *fine*, but has still less affinity to the proposition, that all diseases are curable by steam, indian tobacco, brandy and 'No. 6,' than to the *intimation* that Thomson was commissioned by Heaven, to give a revelation to man on the effects of those renowned agents. That our *reverend* professor, at least does not discourage the idea, that his *magnus*

apollo was thus sent, may be collected from the following extracts:—

"Dr. THOMSON had this opinion from the effects he himself had seen; and his Narrative is convincing from its very form and features. He tells us he was *illiterate*, and he was poor; oppressed by a young, helpless, and sickly family; the practice pursued did not agree with their constitutions, nor diseases; he was, from nature, inclined to try the virtue and operation of plants; the gift of healing, it was impressed upon his mind, God had given to him; necessity, when his child was dying, forced him to try; he was successful; success encouraged him to go on; his neighbors applied to him in the hour of calamity; he relieved their complaints, his time was consumed, his reward *nothing*; he consulted with his wife and friends, whether he should abandon the practice, or abandon his farm and yield to these pursuits; he was counselled to follow his own inclination. Still believing he had a call from Providence, and a degree from the God of nature, he commenced, in form, the healing art. His cause and claims are before the world; laid before the Government of his country; his remedies submitted to the experience of scientific men, and eminent physicians; tried by a jury of his country for his cures, and even perjury could not substantiate a plea against him! This is something very different from all the pretensions to the healing art ever yet set up in the world.

* * * * * *

"This new practice has this *vast and high prerogative, it cannot be wrong, and will not kill; no mistakes are fatal here;* no unexpected and sudden death when you think the patient is just about to do well. I know a physician who put his patient through a course of mercury; in the evening he said he was doing well—he called in the morning, and inquired for his patient, and was informed he was dead! He was struck dumb!—looked on the lifeless corpse, and departed without uttering a single word, with a load of wo upon his heart, that I would not have suffered for a mountain of gold! Yet he could not be blamed; he practised according to his education, and was utterly deceived in the operation of his medicines. He thought they were curing the patient; but alas! they were digging his grave!

The power of prejudice and the empire of pride, may prevail for a season; but the soul will at last arise and re-assert the majesty of her own nature, and shew unto the world, that "there are gifts, beyond the power of education and knowledge, which learning cannot bestow." Learning will neither make a *great* man, nor a *great* physician, but it will highly advance the usefulness of those who are great by nature; who have received the patent of their dignity from God Almighty. Dr. Waterhouse said of Dr. Thompson, he had taken a degree from the school of nature—a diploma from her unerring hands. The very course of that education to which Dr. Waterhouse has so handsomely alluded, was calculated to instruct the author of the new system in useful remedies, and deliver his mind from every bias but the force of experience and truth. With a mind entirely uninfluenced by all authority, unmoved and unobstructed by any thing which had gone before him, he possessed an advantage which, I am persuaded, none ever possessed who were educated in the schools—where we are introduced to the fellowship of *wisdom* by the authority of books and professors.

"It is impossible for the most independent mind to perfectly retain its freedom; it will insensibly bow to the opinions of some celebrated or splendid authority. In after life, indeed, and by much experience, some superior souls are enabled to cast off the shackles of education; but they are the fewest number of that mighty host, which walk forth from the schools of the world, to propagate the errors of their predecessors. Dr. THOMSON had nothing of all this to encounter; he was led by the hand of nature; and without being aware of the fact, he was travelling in the path of the Indian, the German and Celtic doctors—the doctors of antiquity, who without complaint or failure, practised on the unnumbered millions, who overturned the empire of the Romans; and still practice on all the nations of the Gentile world. He is, therefore, now a professor in the most ancient and extensive medical school of the world. A school, not on the decline and about to perish—but one beginning to revive—to put on strength—to extend her conquests, until the learned and the unlearned shall be gathered under the shadow of her wings, and triumph in the splendor of her acquisitions. And we see the dawn of this glorious era, which shall transform the face of the world."

To these flowing paragraphs we shall add from *doctor* Thomson, for the benefit of 'all whom it may concern,' the following important recipe—

"TO MAKE CHICKEN BROTH.

"Take a chicken and cut it in pieces; put the gizzard in with it, opened and cleaned, but not peeled. Boil it till the meat drops from the bone. Begin to give the broth as soon as there is any strength in it; and when boiled eat some of the meat. Let it be well seasoned. This may be given instead of the milk porridge, and is very good for weak patients, particularly in cases of the dysentery.

"When the operation of medicine is gone through, I have said that the patient may eat any kind of nourishing food his appetite should crave; but the best thing is, to take a slice of salt pork boiled, or beef-steak, well done, and eat it with pepper sauce; or take cayenne, vinegar, and salt, mixed together, and eat with it, which is very good to create an appetite and assist the digesture."

Recurring to 'orator' Robinson, we shall, for the present, dismiss both him and his coadjutors, with the closing sentence of his last lecture, and another extract from the DUNCIAD:—

"And let it be remembered, if this system of practice is true, it will have the peculiar blessing of the Almighty upon its side; because it brings the power, the benefits, and the beneficial results of a safe medicine, within the reach of the poor; into their dear *distressed* families, who often perish for the lack of the means to procure medical aid! This single *benefit* cannot fail of drawing down from heaven the peculiar blessing of Him, who bowed his majesty and left his throne, and veiled his glories, to enter the world, and preach "the gospel to the poor!"

"Imbrown'd with native bronze, lo! Henley stands
"Tuning his voice, and balancing his hands.
"How fluent nonsense trickles from his tongue!
"How sweet the periods, neither said, nor sung!

"NOTE.—J. Henley the Orator: he preached on the Sundays on Theological matters, and on the Wednesdays, upon all other sciences. Each auditor paid one shilling. He declaimed some years against the greatest persons."

"This man had a hundred pounds a year given him for the secret service of a weekly paper of unintelligible nonsense, called the Hyp-Doctor."

It appears from the Lectures, that in the state of New-York the *steamers* and the *steamed*, have combined, in petitioning the legislature for permission to carry on the trade. In Ohio a similar memorial was presented to the last session of the general assembly, and referred to the committee on the *Penitentiary*. A notice so flattering, has encouraged the 'gifted' to renew their applications, and that our journal may not be charged with indifference to their interests, we shall insert an exact copy of one of them, lately transmitted to us by a respectable correspondent, who informs us, that it was handed, by the author, to a member of the legislature, to be laid before that honorable body, by the Governor:

"Sir Honorable and respectable Alen Trimble Governor of the State of Ohio I envocate my earnest prayers to you and your predesesors in office to Jere McClain Sec. And vice president and state prothonotry praying to giving you a minute introduction of my dolorous situation and awful calamities difficulties dangers and distructions that I have traversed and still hangs over my head clouds of danger and dorkness unless I can corespond to your feelings the necessity of your great and important assistance to my deseres requests colls and prayers praying that you would consider my inexpresable necessities and grant to me Doc. Uri Martin of Morgan county Ohio a licence to lawfully authorize me to practice medicines of every System agreeable to the Laws of Ohio And conscientiously discharge my duty in every actuating Sphere of Allusion in *alphabetical* or *syntactical* or *electrical* or *physical* or *mental* or *surgical* or *astronomical* or *plisiognomical* or *medical* Terms or words or sentiments or sentences or physical and surgical modes customs rudiments and laws that when I am contiously safe that I may be lawfully safe in adminestering any medicenes or using any means to restore them that is deficient in health agreeable to the dictates of my Judgment and concience and agreeable to my titled systamatical stile and agreeable to my epithetical affirmed advertised notification to the State house door Ohio and to the United States house door that I would devote my time and talents impartially to the practice of Physic in every shape under the well adapted systems and long attentive studies and satisfactory experience I Doc Uri Martin Morgan Co. have counseled with Dan Martin and Calvin Martin of the same county and William Gran-

ville Capt of Mead to Belmont co. & Will. McAma Gospel preacher of Liberty Licking Co. I pray that the law builders——of state of Ohio may licenc me with preveliged Cognized Diploma agreeable to the statutes of the United States of America and under this title Archeotybe Medical botonical Society."

Leaving the 'gifted' brotherhood, to work out the Millenium with 'No. 3' feather few, and clover heads, a 'CURE for CANCERS, SORE LIPS, and OLD SORES,' we shall proceed to a passing notice of a few more of the people's doctors; and first, of *doctor* Swaim—whose 'MEDICINE may without extravagance,' as he himself informs us, 'be considered as a *sacred* boon to the afflicted.' Deserving, however, as it may be of this *disinterested* commendation, it cannot supersede *doctor* Thomson's materia medica, as it is infallible in no more than the following meagre catalogue, of the evils which flesh is heir to:—

"Scrofula or King's Evil, Ulcerated Sore Throat, long standing Rheumatic Affections, Diseases of the Skin, White Swelling and Diseases of the Bones, and all cases generally of an Ulcerous character; Chronic and Nervous diseases arising in debilitated constitutions; but more especially for Syphilis, or affections arising therefrom, as Ulcers of the Larynx, Throat and Nose, Nodes, &c. and those evils occasioned by an improper *use of mercury*, &c. &c.—It has been found to be a most useful *spring* and *fall* alternative for debilitated and bilious persons; it is also beneficial in dyspeptic and nervous complaints, and most internal diseases where the lungs and chest are supposed to be affected," &c.

Doctor Swaim was, we believe, a sadler and harness maker, in one of the 'cow-paths' of the renowned and ancient city of 'New Amsterdam.' Such an occupation of course led him into the society of ostlers and farriers, from whom he seems to have imbibed the first notions of becoming a *doctor*. While this predisposition was upon him, fortunately for the world, he met with a recipe, for some sort of decoction, or diet drink, proposed by a French physician; and immediately invented a PANACEA; which, he vouchsafed to sell to the afflicted, for three dollars a bottle, with a suitable discount to wholesale purchasers! Recollecting that 'a prophet is not without honor save in his own country,' he was not slow in transporting both himself and his *elixir vitæ*, to the other side of the Jerseys; and opened shop in the city of rectangles and staid habits, where the powers of his decoction soon became so great, as to extort from the very *magnates* of the profession, those sententious little passports to the confidence of the people, which have ever since graced the first pages of

his book. In the true spirit of ambition, he speedily sought for new worlds, and embarked his bottles on the ocean; but instead of steering, like his patients, for the 'hollow of the earth,' he wisely directed the prow of his lugger to the famous city of London. Its commander was Dr. William Price, whose first bulletin from Great Britain, was in these encouraging words, to wit:

Liverpool, (*England.*)

"The Vegetable Syrup, called Swaim's PANACEA, prepared by Mr. Swaim, of Philadelphia, has recently been introduced here by Dr. Price, from the United States of America, where it is now extensively used in the treatment of a variety of Chronic Diseases.

Of the efficacy of this preparation Dr. Price has had abundant and most satisfactory evidence, during a course of experiments made under his direction, whilst Surgeon of the Pennsylvania Hospital; and since his arrival in England, he has had the good fortune of witnessing many additional instances of its successful administration.

The diseases in which this medicine has been particularly useful, are those arising from constitutional causes—as in the various forms of Scrofula, whether affecting the bones, joints, or soft parts; and in ca[illegible] where a disposition to this disease is manifested by debility on[illegible]y, it operates as a preventive to the local disease by its beneficial effects on the constitution. It is equally efficacious in *mercurial* disease, and in the secondary forms of syphilis; and has lately been given with marked success in chronic diseases of the liver, which had resisted the careful exhibition of mercury. It has, likewise, very recently been administered with decided advantage by one of the most distinguished Surgeons in London, in a case which had entirely destroyed the right eye of the patient, and a great portion of the side of the face.

WM. PRICE, M. D."

"With horns and trumpets now to madness swell,
"Now sink in sorrows with a tolling bell!"

Meanwhile *doctor* Swaim, with his 'barrels of decoctions,' was busy at home, and ere long—

"Men bearded, bald, cowl'd, uncowl'd, shod, unshod;
"Peel'd, patch'd, and pye bald, linsey woolsey brothers,
"Grave mummers! Sleeveless some and shirtless others"—

stood forth as its trumpeters; and testified to its great efficacy in curing the *mercurial* diseases, produced by the 'regular Doctors.' But in the midst of this splendid success—*lugubri dictu*—what should be discovered but *corrosive sublimate*, the STRONGEST of the mercurial preparations, in this very decoction of all the salutiferous plants! Where is now the *panacea? Sic transit gloria mundi.*

"Is it enough? or must I, while a thrill
"Lives in your sapient bosoms, cheat you still!"

So asks the Genius of Quackery, with an ungrateful smile of contempt; but the 'people' are not easily choked off. They wish for *more;* and why should they not have it? Is not their will the supreme law of the land? The 'riglar doctors' charge high, and poison them into the bargain with 'mercury, calomel, *bleeding*, *blisters*, arsenic, and digitalis.' So says PROF. RAFINESQUE, PH. D., M. D. and PULMIST,' and the 'people' cry amen! Now, then, is the *golden* moment of opportunity, at least for the Professor, who charges for—

"First visit in any cases, $5; but every successive visit only $1. The Poor taught to use the Tan bark for $1. Liable individuals taught how to prevent the disease for $1."

Rafinesque is a name not unknown to our Backwoods readers; but many of them may ask, whether the Pulmist is the same with the fishtaker, and ancient chronicler of Kentucky? We answer, that such *appears* to be the fact; and dismal, indeed, must be the 'times,' that can make an apothecary's muller of such a learned head. We have not had the advantage of seeing the professor's 'doctor book,' the title of which is prefixed to this article, but his 'circular' lies before us, and affords intrinsic evidence, that the *pulmist* is no other than the distinguished *antiquary* who lately settled the limits, and *located* the wigwams, of our Indian tribes for the last three thousand years! Strange metamorphosis of genius! It was, doubtless, while inquiring into the arts and sciences of these savage hordes, long since extinct, that this extraordinary man exhumed the recipies which are to cure consumption, and all other diseases of the lungs! How clever it is, thus, to compel the tomb to give up the knowledge which enables the *doctor* and his agents, at the corner of 'Sixth and Chesnut streets,' Philadelphia, to disappoint its future expectations! This is fairly turning the tables upon the grave. But we must no longer trifle with the curiosity of our readers; therefore, let the doctor speak for himself:—

"DESCRIPTION OF THE PULMEL.

"It is a peculiar compound substance, formed by the chemical combination of several powerful vegetable principles, acting on the lungs and the whole system. It contains no pernicious nor poisonous substance. The taste and smell are sweet, fragrant, and balsamic.

1. *Syrup* for internal use.
2. *Balsam* for inhalation, both liquid and solid.
3. *Balsamic Syrup*, that may be used in both ways, internally and for breathing.

4. *Lotion* or *Milk* of *Pulmel*, for external use as a wash, for frictions, and to inhale the fragrant smell.

5. *Wine of Pulmel*, for general use in debility, made with sweet, fragrant, and healthy wines.

6. *Sweet Chocolate of Pulmel*, in cakes, for internal use.

7. *Liquid ditto*, in bottles, merely requiring to be mixed with warm water or milk to make a cup of chocolate instantly.

8. *Sugar of Pulmel*, for internal use; to be used like common sugar, in milk, tea, coffee, or chocolate.

9. *Honey of Pulmel*, to be used like the Sugar, or eaten with bread.

10. *Lozenges of Pulmel*, for the dry cough, sore throat, and painful consumptions.

11. *Powders of Pulmel*, for internal use; may be sent by mail. Dose six grains.

12. *Pulmelin*, or Concentrated Salt of Pulmel, for internal use; easily sent by mail. Dose one grain, but double price."

The *doctor's* circular is embellished with a handsome vignette on wood, having the motto, 'I heal,' addressed no doubt to his patients. This is very well; but, without wishing to be thought officious, we would respectfully recommend, for the next edition, a line, which, if less 'ambrosial' to the people, will be more applicable:—

"Ye *would* be dupes and victims, and ye *are*."

From the important discoveries made by *doctor* Thomson, *doctor* Swaim, *doctor* Rafinesque, and other 'gifted' individuals, it may, perhaps, be thought by some, that the 19th century is peculiarly blessed with great men; but in our desire to do equal justice to every age, we are constrained to say that past times have seen their like. There is now on our table that most learned work, in one volume of 1207 pages, printed in London, 1693, and dedicated to queen Mary II. by William Salmon, Professor of Physic, the title of which is prefixed to this article.

Like *doctor* Thompson, *doctor* Salmon had been 30 years in the practice of physic, before he produced this "short manual of Physick, design'd for the general use of her Majesties subjects, accommodated to mean capacities, in order to the Restauration of their Healths," and like the *reverend* orator Robinson, he inquires "Why should the name of COLLEGE bear sway against your MAJESTIES and the KINGDOMS Interests? Or why should not a private man, who possibly may have abilities for such an undertaking, be heard, because he wears not Titles of Honor and Grandure?" Finally, like the modern author of the "New Guide to Health or Botanical Family Physician," *doctor* Salmon was obliged to strike out a

new course. "I have, says he, laboured in an untrodden Path, and brought forth a Work, the very naming of which alone, were almost enough to affright one from the Attempt. But the thing was to be done, it was necessary to be done, and to be done by some body it must; the public necessity required it, and the general good that such a performance might do to Mankind, were motives to the undertaking."

What a noble pair of brothers these two benefactors would have made; but then what would the world have done, had nature in a freak thrown them both into the same century. But her ladyship is not so malevolent. She distributes the higher orders of quacks through all ages instead of concentrating them into one, that the people of no particular generation may be in danger of extinction.

Having favored our readers with a few extracts from the modern works which have been named, we shall edify them with some specimens of the 'Druggists Shop Opened.' If the comparison should not be in favor of *doctor* Salmon's audacity, it will at least show, that he was the prototype of the 'peoples doctors' of 1830.

Notwithstanding so many points of resemblance between *doctor* Thomson and *doctor* Salmon, the latter opens shop with the mineral substances, which the former so strongly condemns.

"Who shall decide when doctors disagree?"

Undoubtedly the people: the *ultima ratio empiricorum.* Let *doctor* Salmon, then, be heard by the people, before they assign the civic crown to his rival.

"ANTIMONIUM. *Antimony.*

"*A Glorious and most effectual Tincture of Antimony may be thus made:* Take our Philosophick Oil (which we have discoursed of in our *Phylaxa Med. Lib.* 2. *Cap.* 38.) ℥viij. Antimony in fine Powder ℥iij. digest in a Sand heat for a week, shaking the Glass once a day; then decant the clear: So will you have a most glorious Tincture of Antimony not inferiour to any other, nor much inferiour to the Tincture of Gold. It is good against all manner of Fevers, Continent and Continual, whether Putrid, non-Putrid, or Pestelential, being certainly one of the greatest Cordials that can be made by humane Wisdom or Industry. It revives the Spirits, chears the Heart, restores the radical Moisture, and comforts to a miracle Languishing Nature. Dose *a gut. ad* lx. in any proper Vehicle."

"ARGENTUM VIVUM.—*Quicksilver or Mercury.*

In regard to this, our author differs still more widely from *doctor* Thomson; but coincides with *doctor* Swaim, whose *mercurial* Panacea has been lauded, for nearly the same ailments that are set forth in the following extracts:—

"It is said to be cold and moist in the second degree. *Cæsalpinus* saith, that, taken inwardly, it cleanseth the Bloud from filth, it kills and expells Worms. And 'tis certainly true, that it dissolves all manner of Coaggulations and Congealations of the Bloud and Humours, rectifies the Discrasie of the Bloud, purifies even the Marrow in the Bones, and resists all manner of Putrefaction and Malignity in the whole Body proceeding either from Bitings of venemous Creatures, Poison, Plague, &c.

"Outwardly it helps all kinds of Itch, kills Lice, and dissolves hard Tumours in any part of the Body, though in the Joints, eases all manner of pains almost to a Miracle, resolves Nodes, Tophs, and Gums proceeding from King's-Evil, or the like, and has been found of Mighty use against Cancers of all sorts, whether Ulcerated or not. Some Authors say, that being worn about the Neck as an *Amulet* or *Xenecton*, it preserveth from the Plague, as also from Inchantments and Witchcraft. There is no particular Simple in the Shops, except Antimony, that will yield greater Variety of Remedies than Mercury, nor of which more various preparations are made, serving to Purge, Vomit, Sweat, Salivate, ease Pain, cleanse Wounds, heal Ulcers, remove Deformities of the Skin, &c."

"ARGENTUM, *Silver.*

To the following opinions of *doctor* Salmon, on the efficacy of *silver*, we confidently expect a feeling assent by the whole body of the people. After giving his readers the Hebrew, Greek, and Latin names of this celebrated mineral, *doctor* S. proceeds to say:—

"It is cold and moist, and Cephalick, and therefore is said to strengthen the Head; and by chearing the animal Spirits, resists all diseases of that part, chiefly the Megrim, Apoplexy, Epilepsie, Vertigo, and other like diseases akin to them.

The Tincture prevails also against the Palpitation or trembling of the heart, and in some measure has the Virtue of Tincture of Gold, but not altogether so powerfull: It prevails against Madness, Melancholy, and other Distempers of the Brain, comforting and strengthening the same."

TO BE CONCLUDED AT PAGE 455.

We owe an apology to such of our readers, as reside beyond the region of epidemic steam quackeries, for occupying so large a part of our present number with this *badinage*. Having begun the printing of the article 'Miscellaneous Intelligence,' before this Review was prepared, and having unconsciously extended it beyond the space allotted to it, we are compelled either to amputate its caudal extremity, or to finish it under our analytical head, and have ventured on the latter alternative. To such as may be displeased with its length, we can only say, that we are with them, in opinion and feeling; and promising not to sin again in the same way, indulge the hope being forgiven. EDITOR.

MISCELLANEOUS INTELLIGENCE.

ANALECTIC, ANALYTICAL, AND ORIGINAL.

I.—Analectic.

1. *Iodine at the Hospital of St. Louis.*—Dr. Lugal, Physician to the Hospital of St. Louis, in Paris, the only establishment in which patients declared scrofulous are admitted, has adopted iodine in the cure of scrofula, with great success. His mode of administering it is two-fold:—internally, as a solution of iodine, from half a grain to a grain, in a pint or half a pint of distilled water, in which he also dissolved a certain quantity of common salt. In external applications, he used salves composed of the usual sorts of grease, with certain proportions of iodine and iodate of potassium, or the simple proto-iodate of mercury. In the space of seventeen months, M. Lugol had the opportunity of treating with this remedy 109 scrofulous patients. Of these, thirty-nine remained in the hospital at the end of the year: thirty had quitted the establishment much benefitted: thirty-six had left it perfectly cured; and there had been four on whom the treatment had proved inefficacious. M. Lugol communicated the details of his remedy, and the cures he had performed, in a memoir to the Royal Academy; and the committee to whom it was referred to inquire into the subject, reported that all the assertions of the doctor had proved exact; that the evident effect of the remedy had been established, and that M. Lugol deserved the encouragement of the Academy.—*London Athenæum.*

2. *Camphor Vaporized, a Remedy for Chronic Gout and Rheumatism.*—The *Journal General*, for April last, contains a memoir on this subject, by Dr. A. L. Delormel, read before the Medical Society of Paris.

The apparatus for giving the camphor vapour bath is very simple: it consists of an osier basket covered with impenetrable canvas, in which the patient may sit at his ease, with his head outside. This basket is 4 feet 6 inches in length, by 2 feet 6 inches broad and 3 feet high. Its form is oval. It separates into two equal parts, one of which has a movable lid, with an aperture in it to allow room for the head to pass through. Another aperture in front of the basket serves for the introduction of a furnace filled with live coals, which heat the interior so as to raise it to the temperature of 144 to 167 degrees of Fahrenheit (50 to 60 degrees of Reamur.) On this furnace is

placed, towards the conclusion of the bath, the vessel containing the camphor, which is soon volatilized. If it be wished to augment the heat, the camphor may be allowed, without fear, to enter into combustion.

The bath is taken in the following manner. Every thing being ready, and the opening through which the head is to pass made tight, and the fire introduced, we wait until the internal air is raised to a heat of 77 degrees F. The patient, enveloped only in a flannel gown or a blanket, takes his seat, throws off his covering, and remains exposed to a steadily increasing heat during 20 minutes. The camphor is then introduced, two or three drachms sufficing for a bath. The patient remains exposed to the vaporization for 5 or 6 minutes, and afterwards resumes his gown, comes out of the bath and retires to his bed, in which the perspiration flows abundantly for two hours. The clothes of the patient are now to be entirely renewed.

The bathing may be repeated several times in the day, according to the greater or less degree of revulsion which it is desired to produce by it.

Dr. DELORMEL, like a man of sense, does not laud his remedy as one, adapted to all cases, and every stage of the disease. He tells us plainly that, holding in mind the powerfully stimulating effect of the vapour bath, and the imminent risk of its causing sanguineous congestions, he always directs, as a preparatory measure, one or two bleedings, according to the strength of the patient and the number of baths which he is desirous should be taken in the course of the day. For fear, also, that the digestive passages should suffer from over excitation, he takes care to have applied to the epigastrium a suitable number of leeches; and to make the patient pursue a very rigorous dietetic course at the beginning of his treatment.

The patient is directed to use habitually a decoction of dulcamara; is put progressively on a mild feculent and herbaceous regimen; and when he has taken a certain number of baths, he is put on the use of pills, of which aconitum and opium are the basis. The number of these pills must be gradually increased every day, until the summum dose is allowed: from this there is to be a regular diminution in the same ratio.

This course is often sufficient of itself to cure chronic rheumatism and gout. Sometimes we require auxiliaries—such as the application of cups—flying or permanent blisters and moxibustion.

The first case in which Dr. DELORMEL adopted the above practice, dates as far back as 1807. The author enumerates other instances of its success in both rheumatism and gout.

At the sitting of the Medical Society, January 2, 1829, some of the members, Messrs. DOLENS and GENDRIN, express their belief, that the practice is not original with Dr. DELORMEL. The first refers to Am. Cheze, who advocated baths of vaporized camphor in rheumatism, in an inaugural thesis of the year 1808. Dr. GENDRIN said that he had employed the remedy several times himself, but without success.—*N. A. M. & S. Journal. Oct.* 1820.

3. *The use of Tartar Emetic in Large Doses recommended first in England.*—The *Medico-Chirurgical* claims for Dr. MARRYAT of Bristol the credit of anticipating the Italians in the free use of tartar emetic. Dr. MARRYAT published the last edition of his Therapeutics about 1790, and died in the year 1793. The following are his words in reference to tartarized antimony in fever, which will be found to prove that the plan adopted by RASORI, was, nearly as possible, the first tried in Italy.

"Any fever may be soon extinguished by the use of the following powders: Take of tartarized antimony five grains; white sugar (or nitre) a drachm; let them be well rubbed in a glass mortar, and be divided into six powders; one to be taken every three hours, notwithstanding the nausea the first may possibly occasion. If they bring on a diarrhœa, they should still be continued, and it will soon cease. If these are taken (which is most commonly the case), without any manifest inconvenience, let there be seven grains in the next six powders; and in the next ten. Here I beg leave to retract what I said in some former editions of this work, viz. that till sickness and vomiting was excited, this noble medicine was not to be depended on. For I have since seen many instances wherein a paper has been given every three hours (of which there have been ten grains in six powders), without the least sensible operation, either by sickness or stool, sweat or urine, and though the patients had been unremittingly delirious for more than a week, with subsultus tendinum, and all the appearance of hastening death, they have perfectly recovered without any medicinal aid, a clyster every other day excepted. I have lately seen a great many cases similar to those above, and the tartarized antimony has invariably produced the same effect."

It is but right to make us acquainted with the date of this practice of Dr. MARRYAT; and yet, we may ask whether his countrymen are not censurable for their overlooking or remaining ignorant of it so long. To Italian physicians, after all, are both English and American ones indebted for their knowledge of the impunity, not to say advantage, with which large doses of tartarized antimony are prescribed.—*N. A. M. & Sur. Journal.*

---

4. *Efficacy of sponging with Cold Water in Measles.*—In an epidemical visitation of measles in the neighbourhood of Berlin, during the autumn of 1825, Dr. THAER, a practioner of that city, determined on trying cold lotions of vinegar and water to the whole surface of the body. There were 121 sick of the disease while the epidemic lasted. Of 52 to whom lotions had not been applied, 11 died; whereas there was but one death out of 68 on whom the practice was adopted, and even in this fatal case, in which there were pulmonary tubercles, the remedy had been used contrary to the advice of the physician.

The epidemic exhibited an inflammatory character, which was considerably increased by the deplorable custom still common among the lower classes of keeping the body greatly heated under the idea

of the eruption of the measles, as of all acute eruptive diseases, being thereby accelerated. A great number of those sick with measles were sufferers also from peripneumony, and some from encephalitis. The treatment before the use of the lotions consisted in keeping the air cool around the patient and employing refrigerants and leeches.

Notwithstanding this methodical course, Dr. THAER lost four of his patients—three of them had, it is true, been placed under his care several days after the invasion of the disease, and they had been kept very warm. Recourse was had to leeches in one only of the sixty-eight treated by cold ablution. They had been applied to one other before the latter treatment was commenced.

The following summary of Dr. THAER's practice and views is taken from the Revue Medicale for April.

"1. Lotions were prescribed whenever the temperature of the body of the patient was above 98° Fahrenheit, (29.5° R.) with the understanding that there were restlessness and shortness of breathing.

"The water for the lotion was used colder as the body of the patient was hotter. I was regulated in this respect by the table of FRŒLICH, which I always carry about with me, together with a small thermometer, the bulb of which I placed under the axilla of the patients.

"3. I never made use of sponging when the little patient was in a tranquil state or perspiring.

General remarks. 1. The children who had been thus bathed were for the most part perfectly cured in the space of eight days.

"2. The desquamation seemed to be minor in degree and more rapid in its progress after the lotions.

"3. The convalescents exposed (contrary to my orders) to the open air, which was becoming cold, did not experience on that account any inconvenience, although they had some remains of cough.

"4. When the irritation of the lungs had been of some duration, copious expectoration supervened after the use of the lotions: when the pulmonary disease was in its incipient state, it was cured without expectoration so soon as the functions of the skin had become regular.

"5. In three patients I saw the eruption come out immediately after the lotions, though prior to this there had not been the slightest evidence of it; and whenever the eruption appeared, the other symptoms were considerably moderated in violence.

The author believes that cold ablutions merit a preference over very cold air in the acute exanthemata:

1. Because in the use of lotions, we are absolutely masters of the degree of cold which it is desired to employ, so that it can be modified at any moment or season, and adapted to each individual when there are several in the same room.

2. Because water is a better conductor of caloric than air.

3. Because it is easier for a nurse or attendant to apply lotions of

a reduced temperature every hour or two, than to remain constantly in a very cold room.

The better plan would doubtles be to combine the two methods, taking care always that the temperature of the room should never be below 62° Fahrenheit; and that the patient should have his habitual covering. If in despite of these precautions there should supervene much heat, with a train of other symptoms, we must have recourse to ablution, as above.

The following table is that of Dr. Frœlich, which determines at what degree of temperature the water, either for ablution or cold bathing, ought to be used, agreeably to successful experience in a great number of acute diseases:—

Heat of the body by Fahr. Therm.	Temp. of the water by Fahr. Therm.	Duration in minutes of the Ablutions.	Baths.
98	90 1-2	4	...
99 1-2	85	4	...
100	75	4	1-2 to 1
101	65 to 70	6	1 to 2
102	60 to 70	4 to 6	2 to 3
103	60 to 70	8	6 to 8
104	60	...	3 to 4
105	55	...	2 to 3
106	40	...	1 to 3
107	40	...	1 to 3
108	35	...	3 to 4
108 1-2	35	...	3 to 4
109	35	...	3 to 4
110	35	...	3 to 4
111	35	...	3 to 4

*We have reduced the degrees of Reaumur in the French Journal into those of Fahrenheit.—*N. A. M. & Sur. Journal.*

5. *Subcarbonate of Iron in Tetanus.*—In the fifteenth volume, first part, of the Medico-Chirurgical Transactions, is a short paper by Dr. Elliotson, in which are detailed the histories of two cases of tetanus cured by the rust of iron. In the first, half an ounce of the medicine was prescribed with treacle and mixed with beef tea, every two hours. The symptoms declined in severity after the first two days, and ceased altogether in about twelve days. For the second, two drachms of the subcarbonate were prescribed every two hours, and the dose increased after two days to half an ounce. After eleven days of this treatment the violence of the disease having subsided, the abdomen being soft, and the trunk very little arched, the medicine was now given only every fours hours. "From this time the patient rapidly improved, had but one exacerbation in the twenty-four hours, and that at night, and gradually slighter." He

was so well in a week afterwards that the medicine was discontinued. Enemata of castor oil, or of gruel, salt and oil were given at intervals. Dr. ELLIOTSON believes that in most cases of disease, doses of one to two drachms, two or three times a day, answer every purpose.—*N. A. M. & Sur. Journal.*

---

6. *Cheiloplastie (operation de).—(Operation for New Lip.)*—In consequence of an extirpation of a cancer from the lips, J. L. REINHARD, at 48 years of age, was troubled with a disgusting deformity of the mouth, and could not retain his saliva. On the 18th of June 1827, the operation for hare-lip was performed with success on the superior labium; and eight days afterwards, a similar attempt was made on the lower lip, but unsuccessfully; a second attempt was made on the 9th of July with a similar result. M. TEXTOR then determined to form a new lip from the skin of the neck. The operation was performed on the 1st of August 1827; it lasted for one hour; the flap detached from below the chin, being accurately adjusted to the vacuity to be occupied, was fixed by sutures without adhesive plaster or bandages. It is to the employment of adhesive plasters, that M. TEXTOR chiefly attributes the failure of the operations of cheiloplastic, performed by Messrs DELPECH and LALLEMAND, because they impair and interrupt nutrition in the parts compressed. The dressings were renewed the third day after the operation; on the seventh, all the sutures were removed. The cicatrix being complete on the 27th, it only remained to divide the pedicle of the flap. The deformity was greatly corrected.—*Jour. des Progress, Vol. XIV. from La Clinique.—N. A. M. & Sur. Journal.*

---

7. *Treatment of Fistulæ.*—M. LISFRANC presented to the Academy a patient who had suffered since 1826 with a fistula of the sternum; and of late, three or four new fistulæ had formed near the first. The cause was unknown; the induration and suppuration were great; the general health was much injured, and M. LISFRANC thought it would be necessary to remove the whole or part of the sternum. He first resolved, however, to attempt the improvement of the soft parts: leeches in great number were frequently applied; and when there was no increase of heat, the remaining swelling was treated by means of discutients. The fistulæ closed, and for six weeks the patient has been radically cured.

M. LISFRANC also presented a patient cured in fifteen days of a lacrymal tumour and fistula, without an operation. He employed one bleeding at the arm, leeches in great numbers applied about the ears, emollient cataplasms, emollient fumigations directed by means of a funnel into the nostrils, then resolvent fumigations, a gentle purgative, and blisters behind the ears. These measures were followed by the disappearance of the tumour. To heal the fistula more rapidly, the chloride of soda was added with advantage.

M. LISFRANC reports, that by these measures, he cured eight out of ten cases.—*Journal General, May* 1820.—*N. A. M. & S. Jour.*

8. *Recto-vaginal Fistula.*—Dr. NICOL records a case in the *Edinburgh Medical Journal* for July, in which he successfully operated for a fistulous opening between the rectum and vagina, the result of a laceration of these parts during a tedious labour. The forefinger could be passed from the vagina to the rectum, through the orifice, which was nearly two inches distant from the os externum. Considerable difficulty was experienced in keeping the vagina properly dilated during the operation, and in cutting off the edges of the fistulous opening. This was eventually overcome; the cut surfaces were retained in contact by sutures, and united completely. Dr. NICOL advises, that a considerable portion of the edges of the fistula be cut away; that the ligatures should be passed right through the rectum and so near to each other as to produce a complete mechanical closure, so that flatus even may not pass from the rectum and thus lessen the chance of adhesion. Perhaps, says Dr. N. the introduction and retention of a small gum elastic catheter in the rectum might be useful, in obviating the consequences of any such defects.—*N. A. M. & Sur. Journal.*

---

9. *Spontaneous Combustion of Both Hands.*—The following case of spontaneous combustion from the Arch. General. de Medicine for March 1829, is superior in point of authenticity to any yet recorded. A gentleman of a robust, healthy constitution and temperate habits, 24 years of age, extinguished with his hands the burning clothes of his brother, who had accidentally set fire to them with sulphur, and was immediately afterwards attacked with such acute pain in both hands as to compel him to cry out for assistance. A woman, who came to his succour, observed that both hands were surrounded by a blue flame. This at first was supposed to be occasioned by the sulphur adhering to them, and an attempt was made to extinguish the flame with cold water; but without effect. The gentleman then ran down stairs, to a cutler's shop, and plunged his hands into a quantity of mud; from this he derived very little relief. After suffering in this manner much torture for half an hour, he ran to the house of Dr. RICHOND-DES-BRUS by whom the case is related. On the way both he himself and the woman who accompanied him, observed distinctly the blue flame surrounding the hands. The physician met him at the door, and observed the hands to be red, swelled, and exhaling a kind of smoke or vapour.

He immediately directed his patient to plunge his hands into a well which was opposite, and to keep them there until he experienced relief. On his doing so, the pain abated considerably, and the flame ceased. But he had not gone more than a hundred and fifty paces homewards, when they re-appeared. On reaching his dwelling he immersed each of his hands in a bucket of water, which, as it got rapidly heated, he had repeatedly renewed. As often as he took them out of the water, he remarked a sort of unctuous matter flow along his fingers, and the blue flame re-appeared; the latter was not, however, visible, except in a situation where the light of the candle

was shaded, as under the table. A young gentleman who remained in the room with him, saw the blue flame several times in the course of the night. Towards day-break sparks only were visible. During the succeeding day the pain was very severe; and large vesications, filled with a reddish serum, had formed on the fingers; in some places indeed the cuticle was entirely removed, and the cutis grayish and corroded. The vesications being opened, cerate was applied to the denuded surfaces, and the whole covered with poultices. The inflammation which followed was moderate, the suppuration healthy and in six weeks the ulcers caused by the burning were entirely healed, but the cicatrices were very distinct, and several of the nails had dropped off.

"If," observes the relater, "the flame had been perceived only immediately after the burning of his brother's clothes, it might have been supposed to have resulted from some portions of burning sulphur adhering to the skin. But it resisted the effects of repeated cold affusion, and of protracted immersion in cold water: it continued all night, and was spontaneously reproduced after having been extinguished in the water of the well. It was at first so bright as to astonish those who witnessed it, and to cause the female who first saw it to say that the hands burnt like candles. Such an explanation, therefore, is quite untenable. Although, when the patient first reached my house, I only saw a kind of smoke, yet it must be remarked, that I had a candle in my hand at the time and my servant another, so that the pale light emitted by the hands, may have been then present, but eclipsed by the superior light of the candles. If it was more visible on his return home, this might clearly have arisen from its being brighter, as well as the apartment darker. To what then should this combustion be ascribed? To hydrogen gas? But how could this gas have been generated? We might admit, as probable, that the brisk excitement occasioned by the first burning, caused the disengagement of phosphuretted hydrogen gas, which would inflame on coming in contact with the air. Thus might be explained the trivial nature of the burns. But could we also, account in this manner for the burning pain felt by the patient all the night after—for the continuance of the discharged gas, and the reproduction of the extinguished flame? Electricity does not seem to me to explain the matter any better." The case is very analogous to one which is related in the *Nov. Jour. de Medecine for Dec.* 1822.—*N. A. M. & Sur. Journal.*

---

10. *Debility of the Rectum.*—A diminution of the power in the muscles which act on the rectum in expelling the fæces, is a complaint of very common occurrence, and being attended with the symptoms of *Stricture of the Rectum*, it is frequently mistaken for it. Several cases of this kind have lately come under our notice.—*Med. Gaz.*

11. *Preservative power of Belladonna against Scarlet Fever.*—The following remarks are from the pen of Prof. Koreff, in a letter to the late M. Lænnec published in the *Bal. de Scien. Med.*

"Observation clearly proves," says he, "that the belladonna, taken for some time, either in powder or in extract, produces, especially in infants, a redness of the skin, which is sometimes transient, but at others more durable; dryness of the mouth, with a sense of heat in the throat; dilatation of the pupil; anxiety; and occasionally swelling of the sub-maxillary glands: symptoms having a great resemblance to those which accompany the eruption of scarlatina. The effects of the belladonna has also this in common with scarlatina, that neither of them produce the redness of the skin invariably, whilst the symptoms about the throat are always present. I confess to you, however, that all these analogies did not appear to me sufficiently strong to persuade me that in this plant was really to be found a preservative against scarlatina, similar to that which the cowpock affords against variola. It was not till I had received the authority of the celebrated Soemmering, who informed me that he had obtained the most satisfactory results with it when the disease raged epidemically, that I determined to employ it. This malady, accompanied by the most unfavorable symptoms, and having entirely changed its usual character, was at that time producing ravages almost as fatal as the contagious typhus. I then, for the first time, had the happiness to protect from this dreadful contagion almost all those who took the belladonna with a little perseverance, and of these there were many thousands. Since that time I have never lost sight of this discovery, which becomes the more valuable as the scarlatina has increased during the last thirty years, both in violence and extent, in many countries; and I have always found the same effects in different climates, and in epidemics of opposite characters. Many other physicians have equaly confirmed the preventive powers of this plant, and the German journals are daily filled with proofs of a benefit which, with respect to some countries, equals that of vaccination. In France, the capital and the provinces of which appear less subject to these fatal epidemics than Germany, Switzerland, the Tyrol, Poland, and the north in general, less attention has been given to this discovery, and it has been rejected, it must be said, too lightly, and without any sufficient examination, as may be seen in the article *Belladonna* in the Dictionnaire des Sciences Medicales. I only remember a single observation on this important subject, by Dr. Meglin,* who gives an account of a trial which he gave to this preservative during an epidemic of scarlatina at Colmar, and which confirms all the assertions of the German physicians. The absence of present danger is perhaps, the cause of this indifference towards a discovery, which, important in itself, might also be fruitful in results applicable to other diseases. At present, however, I shall confine myself to an account of the results which have been ascertained (by repeat-

*Nouveau Journal de Medecine, 1821.

ed observations, and by a great number of individuals placed in very different circumstances,) without incurring the reproach of having proceeded in a manner not sufficiently rigorous.

* * * * * * * * * *

"The powder mixed with sugar, or the extract made very carefully from the juice of the recent plant, are employed after the following formulæ:—Extract of belladonna three grains, dissolved in an ounce of cinnamon water. Powder, or root of belladonna, two grains, mixed with drachms of white sugar, divided into sixty doses. From half a dose to a whole one is given to a child, from six months to two years old, four times a day; to children from three to six years old, from a dose to one and a half; to those from six to nine, two, to two and a half; to those from ten to twelve, three, to four and a half. Of the solution, a drop is given for every year of the child's age, once a day and fasting. Observation has shown that, when the epidemic is very fatal, or the intercourse with the patients very frequent and intimate, it is prudent to increase the dose a little. It has not yet been possible to determine, in a satisfactory manner, the length of time which is necessary to eradicate, by this remedy, the susceptibility to the contagion. Every thing leads us to believe that the remedy, if used during a time too short to ward off the contagion, moderates very much the malignity of the disease. We know for certain that the remedy does not permanently overcome the disposition to scarlatina; and it is necessary to resume its use on every occurrence of an epidemic. We have always observed that the most intimate communication with the sick does not produce the disease, provided the medicine has been employed eight or nine times previous to being exposed to the contagion, and continued to the period of desquamation; a circumstance important to nurses. It appears more certain to begin with rather strong doses in order to guard against the first impression of the contagion, and to diminish the quantity after a few days. No sensible effect has been observed to follow the continued use of this small quantity of belladonna. Up to the present time, neither season nor locality, nor any other circumstance, has appeared to diminish the preservative effect of this plant.

* * * * * * * * * *

"Do not believe, my learned colleague, that these results have been too lightly deduced, or from a small number of individuals, or from epidemics of little violence. It is from entire provinces,—from cities affected with this terrible scourge,—from epidemics the most fatal, in all seasons, and in localities the most diversified,—on individuals of every age and of every condition, that observations have been made with the greatest accuracy, and have led to the above results."—*Lon. Med. Gaz.*

12. *Solution of Camphor.*—Dr. H. N. Preston, of Newton, recommends, in the last No. of the "Genius of Temperance," that a solution of Camphor in Lime-water be used in families, instead of the common Spirits. His mode of dissolving this gum, is to pour

six ounces of lime-water on two drachms of camphor, previously rubbed down with an equal weight of quick lime. After allowing it half an hour to settle, the clean solution to be decanted.

The Doctor is of opinion that the lime can in no case where camphor is used in families, interfere with its desired operation; and the advantages of this preparation over the spirituous are, that when mixed with water, the gum will not separate; it is more economical; and, most of all, it is one important step toward the desirable banishment of alcohol from medicinal preparations. These are certainly very important objects; but we are not aware why the common Emulsion or Mixture of Camphor, which has long been in use and kept by all apothecaries, does not answer to the full all the purposes contemplated by this new preparation. The sweet almonds and sugar which enter into its composition, make it more palatable than the lime-water solution; and we should always be slow to adopt any new medicine in place of one which is well known and in common use, when the former offers no superior advantage. Physicians might well prescribe the Emulsion, in many cases where they are in the habit of directing the alcoholic solution.—*Boston Med. & Sur. Jour.*

---

13. *Fœtus affected with Fungous Hæmatodes.*—Dr. Tonnele delivered a woman of a child, which had upon its right parietal bone an enormous fungous hæmatodes. The base of this tumor originated in the osseous tissue, and perforated it like a sieve; the dura mater was healthy.—*Journal des Progres.*

---

14. *Acute Watery Effusion in the Brain occuring without Inflammation.*—In 1825 Dr. William Sherman, of London, published a small volume for the purpose of controverting "the doctrine of water in the brain being a specific disease, and to oppose the prevalent opinion of the proximate cause of the watery effusion being inflammation." In the July number (1829) of the Edinburgh Medical and Surgical Journal, this gentleman observes that since the appearance of his essay, "similar opinions seem to have been entertained, more especially as to the latter part of the above quotation, by men of extensive attainments and considerable reputation, particularly by Dr. Monro, in his book on the Morbid Anatomy of the Brain." After some other observations the following case is introduced, in which Dr. S. conceives that the effusion "was not the consequence of any preceding inflammation in the membranes of the brain, but arose as an accidental occurrence in a weakly and scrofulous constitution; predisposed, therefore, to a great degree of irritability of those membranes."

A child three years old, of a weakly constitution, and scrofulous appearance, was brought, November 6th, to the West London Infirmary, with syptoms of hydrocephalus. His head was constantly in a rolling motion, accompanied with convulsive twitchings in his limbs. His countenance had an idiotic expression, and he was in

capable of recognizing his mother or surrounding objects. The pupils were greatly dilated; the child appeared unable to see, a near approach of the hand of a bystander to the eyes, not producing any motion of the eyelids. The pupils, however, slightly contracted on the approach of the light of a candle, but not otherwise. Bowels somewhat constipated; but there was neither hardness nor tension of the belly,—pulse nearly natural. The child had not spoken for many days. The mother stated, that two weeks previously he was attacked with febrile symptoms, accompanied by purging. These continued for a week, when she discovered in the morning, that the child was unconscious of her presence, and incapable of seeing, and exhibited all the other symptoms now present. A blister was applied to the right side of the abdomen, and a grain of calomel directed every two hours. November 9. Blister had drawn and discharged freely; twelve grains of calomel had been taken, but at rather longer intervals than prescribed. Bowels freely opened, urine copious. The child was now conscious of the mother's presence, and of surrounding objects; can see perfectly. The rolling motion of the head, and convulsive twitches have ceased. Ten drops of sulphuric acid and of vinegar of squills were directed every four hours, and four grains of rhubarb and magnesia, with one of calomel, every night. By the 20th of the month all symptoms removed. The medicines were continued for a short time longer, with the addition at night of three grains of ferrum tartarisatum.

In relation to this case, Dr. S. remarks, that he "can see no evidence of inflammation of the brain or of its membranes having taken place during any time of the progress of the disease; no prominent symptoms of the head being particularly affected, manifested themselves in the space of the first week; and the sudden accession of those denoting effusion of fluid would seem to be the *effect* of that state of the system, whatever it was, to which the febrile symptoms were owing. If it be maintained," he adds, "that these febrile symptoms themselves were nothing more than symptoms of inflammation of the brain, to viz. that they constituted hydrocephalus intermus in its first stage, it will be necessary to explain why this inflammatory disease should have terminated in perfect recovery, without the counteracting means, whilst almost all severe cases of a similar kind, where large bleedings and antiphlogistic measures have been employed, terminate fatally."

We present to our readers the outlines of the foregoing case, as we consider it to be one highly interesting in many points of view. We must say, however, that we cannot receive it as a proof of the non-inflammatory character of hydrocephalus. There is in fact no positive evidence that watery effusion had taken place in the brain of this patient; on the contrary, there is every reason to believe that it had not. Dropsy of the brain we know to be a disease very generally fatal, whereas in the case before us all the symptoms attributed to the existence of effusion within the brain disappeared in a few

days, under a treatment certainly not the most active. We have seen cases in which phenomena, very similar to those which occurred in Dr. S.'s patient, though probably not to the same extent, were very evidently connected with gastric irritation, ceasing almost suddenly upon the expulsion of undigestible substances or worms from the stomach. In these instances it is very certain that water did not exist in the brain.—*N. A. Med. & Sur. Jour.*

---

15. *Tartar Emetic in Large Doses.*—We take the following summary in Dr. BAYLE's work, *Bibliotheque de Therapeutique*, from the *Journal General* for June last.

1. Tartar emetic administered internally, in disease, in doses of from 8 grains to a scruple or drachm, and even several drachms during the day, is not a poison; it is not even followed by bad effects, except in a small number of cases, in which manifest counter-indications were present.

2. Whether borne or not by the sick, it does not produce in them inflammation of the gastric intestinal mucous surface. When evidences of this phlegmasia exist, such as redness of the tongue, pain of the epigastrium, diarrhœa, we often find them disappear under its use (LAENNEC, DELORMEL, MERIADEC-LAENNEC, LAGARDE, FONTANELLES); when the patient dies we commonly find the digestive tube exempt from alteration, and the internal membrane pale, or slightly injected (MERIADEC-LAENNEC, STRAMBIO, &c.)

3. Tartar emetic in large doses is a powerful remedy in *peripneumony*. It is very useful either as an auxiliary to bleeding, or as the sole curative means, when sanguineous emissions have not arrested the progress of the disease, or when we deem it improper to have recourse to them.

M. PESCHIER cured all his patients with the exception of one, without bleeding, and entirely with the tartar emetic. M. WOLF has cured *ten*, all that he treated; M. PALAIS, *one*; M. PRATO, *two;* M. RASORI, *fifty-two* out of *sixty-one*, in his *civil clinic*, and *fifteen*, being the whole number, in his military clinic.

As to the pneumonic cases which were subjected to both blood-letting and the use of the tartar emetic, we learn that RASORI cured in his civil clinic *four hundred and forty-four* out of *six hundred and two*, which makes a mortality of twenty-two out of a hundred. In his military clinic he cured a *hundred and forty-nine* out of a *hundred and seventy-five*—deaths *twenty-six*—mortality fourteen per cent. M. LAENNEC out of *fifty-seven* cases cured *fifty-five*—deaths *two*, which is equivalent to rather less than one in twenty-eight. M. A. LAENNEC cured *thirty-seven* patients out of *forty*—deaths three, or one in thirteen.

The greater number of these persons took the tartar emetic without its producing vomiting, or at least only shortly after its first administration. In others it was not retained on the stomach, although this circumstance was not always an obstacle to the cure.

4. *Articular Rheumatism* is, next to pneumonia, the inflammatory affection in which the antimony in full doses has been the most efficacious. Among a great number of cases treated by M. LAENNEC, this professor found that the mean period of the disease under this treatment was seven or eight days. Of thirteen cases collected from his clinic, the tartrate of antimony and potass was evidently useful in *eight*; it was without effect in *two*; hurtful in *one;* and of doubtful efficacy in *two* (MERIADEC-LAENNEC). Out of five cases of acute articular rheumatism, M. HONORE cured *four* (LAGARDE). Of fifteen cases cited by M. DELORMEL, *thirteen* were followed by a cure. The *Observer* of *Naples* contains *six* other cases of cure, *two* of which have been published by Dr. SPADAFORA.

5. Tartar emetic in large doses has been tried in many other affections, but on too small a number of patients to inspire us with an entire confidence in the success of the practice.

M. LAENNEC has cured by this means, an *arachnitis*, three cases of *acute hydrocephalus*, a *phlebitis*, three cases of *chorea*, and two *anginas*. M. A. LAENNEC has succeeded in two cases of *idiopathic* tetanus. M. RECAMIER in four cases of acute pulmonary catarrh. M. FONTANELLE in one of *jaundice*.

6. In other diseases in which this mode of treatment has been tried, there are many cases of its failure, and some of its having been injurious. M. LAENNEC has remarked that the tartrate of antimony and potass produced a prompt reduction of the inflammatory organs in pleurisy, but that it did not hasten the absorption of the effusion which is the consequence. Out of eleven cases of apoplexy, six have been cured; but as the professor made use at the same time of blood-letting, it is uncertain whether the tartar emetic contributed to the cure (MERIADEC-LAENNNEC). In a case of rheumatism, and another of gout, it was evidently hurtful (MERIADEC-LAENNEC). Its employment in *insanity*, accompanied with *semi-paralysis*, was not in general attended with any success.—*N. A. M. & S. Jour.*

---

16. *Partial Palsy cured by Strychnia, locally applied.*—The subject of this case was an habitual drunkard, aged 36 years. He had lost the power of the left fore arm and hand ten days previously. The sensation of the parts was perfect, but the mobility much impaired. There was no head ach. Over a vesicated surface on the back of the fore arm, one eighth of a grain of strychnia was sprinkled. The dose of the medicine was increased by doubling the quantity every day until it amounted to one grain, after which a fourth of a grain was to be added. The improvement was manifest from the second week, and the patient, without having experienced any uneasy symptom, was dismissed cured at the end of five weeks from the commencement of the treatment.

In another patient, affected with paralysis of the flexor muscles, and diminished sensation of the right leg, a cure was effected in the course of six weeks.—*N. A. M. & S. Jour.*

17. *Inflammation of the Sinuses of the Brain.*—During the present year M. TONNELE read before the Royal Academy of Medicine a memoir upon the diseases of the sinuses of the dura mater. We shall notice on the present occasion only so much of the memoir as relates to inflammation of these vessels. The fact that the sinuses of the brain were, like the veins, liable to inflammation, and to the formation of false membranes in their interior, was established in a paper published by M. RIBES in 1825. Of these inflammations M. TONNELE reports several cases, which he arranges according as the pseudo-membranous concretions occur with or without suppuration. Of the first we notice particularly the three following. 1. An infant two years old, after the disappearance of an eruption of the scalp, was affected with several symptoms of cerebral disease; as peevishness, somnolency, contraction of the limbs, dilatation and insensibility of the pupils, &c. After death, pseudo-membranous concretions, with suppuration, were discovered to exist in the superior longitudinal sinus and in the veins of the pia mater; there was also an ecchymosis in the tissue of the latter membrane and a superficial softening of the brain. According to M. T. this case presents an instance of inflammation of the internal membrane of the sinus, producing false membranes, and finally ramollissement of the brain. 2. A female child two years old, affected with scrofulous ophthalmia, was suddenly seized with convulsive movements of the muscles, and other indications of cerebral disease: these were shortly replaced by syptoms of adynamia, which caused the death of the patient in a few days. Upon the right side of the occiput there was discovered an ulcer, the existence of which had been overlooked. *Sectio cadaveris.* The right laternal sinus was twice the ordinary size, and filled with thick, fetid pus, containing small solid concretions and numerous clots of blood; the internal surface of the sinus was covered with a thick false membrane; the dura mater, where it forms the sinus, as well as the corresponding parts of the cerebellum, were covered with a layer of pus, and the nervous substance beneath this pus was softened. M. T. conceives that in this case the ulcer at the occiput was the cause of the inflammation of the sinus, in consequence of the pus having been taken up by the absorbents and carried into the former. With respect to the syptoms under which the patient laboured during life; he refers the convulsive movements and other symptoms of cerebral disturbance to congestion and inflammation of the brain and of its meninges; while he ascribes the symptoms of adynamia to a poisoning of the blood by the absorbed pus. 3. An infant two years old, for a long time in a weakly condition, died suddenly as if from suffocation. On examining the body, it was found that a quantity of blood had escaped under the pericranium through the sagittal suture; the superior longitudinal sinus, to the extent of two-thirds anteriorly, was distended by a large coagulum evidently of recent formation; throughout its posterior third it was lined with false membranes mixed with a cream-like fluid. The

veins which terminated in the sinus were very much distended. In the centre of the right hemisphere of the brain was discovered a large cavity filled with blood, to which the sudden death of the child is to be attributed. In those cases in which there exist in the sinuses false membranes without any collection of pus, the effects are the same, viz. impediment to the circulation of the blood; effusion of the latter on the surface of the brain; infiltrations of blood in the arachnoid and in the cellular tissue beneath this membrane; during life symptoms of nervous and cerebral disease; in some cases sudden death.

The causes by which inflammation of the sinuses of the brain is produced, M. T. observes, it is difficult to determine. In the majority of the cases which he has observed it occurred in patients labouring under tinea capitis, or in whom there was also a development of false membranes in several other parts of the body.—*N. A. Med. & S. Jour.*

---

18. *On the detection of Corrosive Sublimate. By* M. Orfila.—In an article, contained in the June number of the Journal de Chimie Medicale, M. Orfila comments upon the method proposed by Mr. James Smithson, for detecting minute portions of corrosive sublimate; which consists in plunging into the suspected liquid a small electrical pile, formed of a gold ring, wound round in spiral by a rolled piece of tin-foil, and then adding a few drops of muriatic acid. Mr. Smithson alleges, that sooner or later, if the liquid contain corrosive sublimate, the ring will become whitened by a precipitation of the metallic mecury.

M. Orfila admits that corrosive sublimate may be detected in this manner; but asks whether this mode of proceeding may not lead to error, by giving very similar results, when employed for solutions which contain not a particle of mercury. M. Orfila thinks it may; and adduces in support of his opinion, the following facts:

A sudorific syrup, called a *regenerator of the blood*, having been submitted to his examination, he tested it by the usual reagents for detecting minute portions of mercury, without success; and then had recourse to Mr. Smithson's method. At the end of two hours the gold exhibited white spots, resembling those which might be expected to result from a weak solution of a mercurial salt; and upon exposure to heat, it resumed its yellow colour, just as happens to gold whitened by mercury. M. Orfila was hence strongly inclined to believe that the syrup contained a mercurial preparation, and nevertheless it contained none. To render the matter certain that the whitening of the gold did not depend upon a thin coating of metallic mercury, M. Orfila prepared the syrup himself, without using any mercurial preparation, and, after acidulating it by a few drops of muriatic acid, plunged into it the minute electrical pile. At the end of twenty-four hours, the gold was whitened, and when subjected to the fire was similarly affected, as it would have been, had it been covered by a minute film of mercury.

M. ORFILA undertook to determine the cause of this appearance; an investigation of the more importance, as calculated to guard physicians and pharmaceutists from committing errors, when charged with making reports on subjects connected with the administration of justice. The explanation which occurred to him was, that a small portion of muriate of tin was formed, and that this was decomposed by the elementary pile, and the metallic tin deposited on the gold which it whitened; and that when the whitened gold was exposed to heat, the tin combined with the gold, and formed an alloy containing so little tin as not to impair the colour nor general appearance of the gold.

M. ORFILA made several experiments, and satisfied himself that the explanation above mentioned was correct. He found, however, that if plates of gold and tin were *separately* suspended in a weak solution of muriatic acid, the whitening of the gold did not take place. Hence it occurred to him, that if Mr. SMITHSON's plan, thus modified, would detect mercury by the whitening of the gold, it would be free from all ambiguity from the danger of the whitening being produced by the tin. The experiment being thus modified, resulted in giving to the gold a slight and loosely adhering coating of calomel, on the metals being separately suspended in a weak solution of corrosive sublimate. Thus it was shown, that to obtain the result of a coating of metallic mercury on the gold, the minute pile is necessary.

M. ORFILA next examines the following question; is it practicable to distinguish whether the gold of the little pile is spotted white by mercury or by tin? He found that the gold when whitened by the tin might be restored to its natural colour in a short time, by the application of concentrated and pure muriatic acid; but when whitened by mercury and similarly treated, the whitened portions resisted the action of the acid, even for twenty-four hours. Hence it is obvious that muriatic acid furnishes a means of distinguishing whether the gold be whitened by mercury or tin. M. ORFILA, however, prefers that the discrimination should be made by subjecting the whitened gold to heat at the bottom of a small glass tube, drawn by means of a lamp to a capillary orifice. If the white colour arises from mercury, it will be volatilized, and condensed in the small end of the tube. If however, it be from tin, no such effect will take place.

M. ORFILA concludes his paper by remarking, that Mr. SMITHSON's little apparatus, when employed with the precautions necessary to determine the nature of the whitening metal, "is without contradiction, the most delicate reagent that can be employed for the detection of minute traces of a mercurial salt."

[We would suggest, that the small pile of Mr. SMITHSON might be formed by combinations of gold, severally with copper, or iron. If these combinations would succeed in precipitating mercury, they would be free from the ambiguity attendant on the use of tin.—ED.]

N. A. Med. & Sur. Journal.

19. *New organic Alkalies discovered in Cinchona Bark.*—We derive the following interesting article from the *Journal des Progres*, Vol. III. for 1829. Dr. SERTURNER, chemist, of Hamelem, remarked, during the prevalence of an epidemic intermittent fever in 1828, that the quinia was far from being a certain specific against this disease, even when given in doses of six or eight grains, conjoined with acids. It stopped the paroxysm, but not in a permanent manner; for there were many relapses, which made it necessary to resort to the bark in substance, which, administered in large doses, in conjunction with acids, rendered the relapses much less frequent. Dr. SERTURNER likewise ascertained, what has been observed by other practitioners, that quinia cannot be substituted for cinchona, as a tonic. He was therefore, induced to undertake new analytical researches on the different kinds of cinchona bark, with the view of ascertaining the cause of this difference. The details of his experiments, he reserves for future publication, communicating at present his principal results, which are as follows:—

The precipitates obtained by treating the acidulous extracts of cinchona bark by alkalies, comprise, besides quinia and cinchonia, certain additional organic alkalies, which may be considered as modifications of the former.

These new organic alkalies, and especially the principal one, which Dr. S. calls chinioidia (*chinioidine*) are intimately united with a sub-acid resinous substance, which, if not hurtful, is at least not beneficial, and which is very difficult to separate. Its separation can be effected completely, only by the vegeto-animal charcoal, which is obtained in the preparation of safranic acid, discovered by M. LIEBIG, after having dissolved in strong sulphuric acid, (diluted with three or four times its weight of water) the impure alkaline substance, which remains after the sulphate of quinia has been separated by crystallization, the solution is to be decolorized by means of a mixture of the vegeto-animal charcoal, above mentioned, with ordinary animal charcoal. But, before conducting this decoloration, it is best to treat the solution with alcohol, in order to separate the earthy salts.

The new alkali exists in the cinchona barks, associated with quinia and cinchonia.

Properties of chinioidia. It resembles the other alkalies of the cinchona bark, in its insolubility in water, its colour and taste. But it is distinguished from them by its activity, and its greater capacity of saturation. Its alkaline reaction, and its intimate combination with an extractive matter, which is probably an acid, are characters not less striking. Its salts, when freed from extractive, are affected by heat and liquids, after the manner of balsams; being viscid and fusible like the latter, although they contain frequently, to all appearance, their acids in a dry state. As a medicine, chinioidia is one of the most precious agents of the materia medica. It is not merely a better febrifuge than quinia, and even than the bark in substance;

but it possesses many other therapeutic properties, which, admitting that they exist in the bark itself, are not to be found in quinia. It was prescribed by Dr. SERTURNER [in saline combination?] in the dose of two grains, three times a day, with the direction to swallow a little vinegar after each dose with the view of saturating the gastric juice, which is sometimes alkaline in fevers, and which by acting on the salt, sets free the chinioidia, and thereby renders the medicine insert, in consequence of the insolubility, of the new alkali, when uncombined. In all the cases, treated by the new remedy, the fever was cut short without relapse, and in every instance, the concomitant symptoms, such as the paleness of face, loss of appetite, œdema of the legs, &c. disappeared in as horter time than is usually the case. The medicine failed only in a single instance. The quantity necessary to effect a cure was generally from twelve to twenty-four grains.—*N. A. M. & Sur. Journal.*

---

20. *Ophthalmia Neonatorum.*—Under this title, Mr. Wishart of Edinburgh, has published an able article on the purulent ophthalmia of infants, of which we shall endeavor to present our readers a brief analysis.

The disease usually commences in from three days to four weeks after birth. The eyelids are first observed to be frequently glued together, so that the child has considerable difficulty in separating them, as is evident from the action of the muscles in opening the eyes. They are however generally open in a moderate light, and still more so if the room is darkened. On farther examination, the conjunctiva of the ball is found clear, but that of the lids is observed to be red, puckered, and covered with a white, mild, thick slime. The difficulty of opening the lids, the intolerance of light, the swelling and redness of the conjunctiva, gradually increase as the disease advances. At length the lids remain constantly shut, and any attempt to separate them occasions great pain to the patient. This can only be effected during sleep, by moistening their edges with lukewarm water. On making the separation, a copious discharge takes place of thick mucus, varying in color from white to a greenish yellow, and often mixed with streaks of blood. The quantity of this is in proportion to the violence of the inflammation, and the length of time that the lids have been allowed to remain undisturbed. Still, however, the redness is confined to the conjunctiva of the lid, or if the ball is inflamed the injected vessels are not so numerous but that they apppear perfectly distinct.

At this period, an attempt to open the eye is not unfrequently followed by eversion of the lid. This eversion must be carefully replaced; otherwise the lining membrane thus exposed to the air becomes more red and swollen, and acquires the appearance and character of inverted *rectum*. It will sometimes happen that the lid can not be reduced, and the eversion is permanent. This state of things is usually followed by the gradual failure of the patient.

An occurrence not uncommon at this stage of the disease, is a

greater or less hemorrhage from the lids. This, though alarming, is a favorable occurrence; for by this bleeding turgid vessels are emptied, and the inflammation diminished. If, however, the progress of the disease is not checked, the symptoms which ensue are more formidable. In consequence of the swelling of the lids, the edges of the tarsus are contracted, and the matter secreted can no longer escape. Rendered acrid by confinement, it increases the inflammation of the eyeball, an ulcer forms on the cornea, which becomes gradually deeper till the membrane is perforated, and the consequences which ensue terminate only with the entire destruction of the organ.

Among the causes of this disease, the more obvious are those which produce other complaints among the poorer classes,—namely, exposure to cold or dampness, or to a strong light, as in too suddenly admitting the glare of sunshine, or in dressing the child before a large fire. A much more frequent cause, however, than is generally suspected, is the existence of morbid uterine discharge, whether venerable or otherwise, in the parent at the period of delivery. More than two-thirds of the infants affected, are born of mothers laboring under leucorrhœa.

The complaint, when treated in the best way, seldom continues less than three weeks, and if neglected or unskilfully managed, may be protracted to ten or twelve. The morbid changes most frequently left by it, are the ectropium or eversion already mentioned, and opacity of a portion of the cornea. Neither of these occur except in the worst cases, and are for the most part owing to injudicious treatment.

With regard to the prevention of this complaint, two precautionary measures are suggested by the considerations already mentioned, —one, to remove if possible any morbid discharge existing in the parent previous to delivery, and the other, to wash the eyes of the infant carefully immediately after birth.

The disease, as already stated, seems to have a certain regular course, and a violent or sudden interruption of its progress would be dangerous to the patient. The following mode of treatment, however, is safe and effectual. If the case is seen within a week from its commencement, which is as soon as generally happens, the purulent discharge is to be carefully washed away with warm water, and the following lotion ordered:—

℞. Sulph. Zinci ℈i.
Aquæfont ʒx. Solve et adde
Liq. Subac. Pl. ʒi.
Tinct. Camph. ʒi.—ʒij. M. et cola.

This is to be carefully injected three times in a day with a fine pointed ivory syringe; at first diluted a little with hot water, so as to be rendered tepid, in which state it answers better, especially in

cold weather. If the discharge be very great, the intervals of its application must be abridged. In the state above mentioned, it generally produces pain, which continues from five to ten minutes; if the child cry longer than this, it ought to be diluted. In the mean time, the eyes are to be frequently washed with warm water, and at night a small quantity of the ung. ox. zin. is to be inserted between the lids. Leeches or scarification may be added to the treatment, if necessary.

At the end of two weeks, if the cure goes on well, the inflammation will have diminished, and the discharge will acquire a watery appearance. At this period, the ung. hyd. ox. rub. may be substituted for that above mentioned, and the lotion altered to the following:—

R. Mur. Hyd. gr. i.
Aq. Ros. ʒ vi. M. et adde
Vin. Op. ʒ iss. M. f. coll.

At the end of a month, it generally becomes unnecessary to use the syringe, and the collyrium may then be continued occasionally by dropping a portion on the inner angle of the eye, and allowing it to pass over the surface.

The most usual sequelæ of purulent ophthalmia, as above mentioned, are opacity of the cornea and ectropium. The former complaint is removed in young infants without difficulty. The best treatment consists in the use of the ung. hyd. prec. at night, and the vin. opii. more or less diluted, in the morning. The eversion of the eyelid, when recent, is easily reduced, and rarely becomes permanent or irreducible, except in consequence of neglect. When it is so, however, the conjunctiva must be treated with the ung. hyd. prec., or some mild caustic, until the swelling is diminished, when an attempt must again be made to accomplish its reduction. The sooner this is effected, and the changed surface is withdrawn from the action of the air, the sooner will it return to its healthy state.

Bos. Med. & Sur. Journal.

---

21. *Influence of the Age of the Parents on the Sex of their Offspring.*—The interesting but mysterious subject of conception, and the laws, if any exist, which regulate the sex of the offspring, has received, of late years, an unusual share of the attention of the faculty. The following are the result ofsome researches on this subject, by Professor Hoffnacker, of Inspruck, published in the Inspruck Med. Chir. Zeitung.

1. In marriages where the mother is older than the father, the average number of male to that of female births is 90. 6: 100.

2. Both parents being of the same age, the proportion of boys to girls is 92: 100.

3. The father being from three to six years older than the mother, the number of male to that of female children is 103.4: 100.

4. Where the father is from six to nine years older than the mother, the proportion is 124.7 boys to 100 girls.

5. The age of the father being from nine to twelve more than that of the mother, the proportion is 143.7 : 100.

6. Where the age of the father is eighteen years and more above that of the mother, the proportion of male to female births is 200 : 100.

7. Young men, from twenty-four to thirty-six, produce with young women, from fourteen to twenty-six, 116.6 boys to 100 girls.

8. If men between the age of twenty-four and thirty six, are married to females between thirty-six and forty-six, the proportion of male to female children is 95.4 : 100.

9. Middle-aged men, from thirty-six to forty-eight years, being married to young females, the proportion of their male and female children is 176.9 : 100.

10. Middle-aged men, and middle-aged women, produce 114.3 male to 100 female children.

11. Middle-aged men, being married to women of a more advanced age, the proportion of male to female children is 109.2 : 100.

12. Old men and middle-aged women produce 190 male to 100 female children.

13. If husband and wife are both equally advanced in years, the proportion of their male and female children is 164.3 : 100.

Bos. Med. & Sur. Journal.

---

22. ***Mode of suspending the Secretion of Milk.***—M. Ranque, chief physician to the Hotel Dieu of Orleans, employs with success, to diminish the sensibility of the mammary gland, upon which the secretion of milk depends, frictions morning and evening upon the breast, with the following liniment :—R. Laurel water ℥ij.; sulphuric ether ℥i. ; extract of belladonna ℈ij. He prescribes at the same time rigid diet and sudorific drinks.

M. R., it is said, employs this liniment with success in engorgements of the testicles, after using antiphlogistics.—*Journal des Progres.—Bos. Med. & Sur. Jour.*

---

23. ***Treatment of Imperforate Rectum****.—Imperforate rectum, or imperforate anus, is not only a dangerous, but unhappily a much too frequent malformation, and one in which surgery alone can be of service. At page 515 of the last number of this Journal, we related the particulars of an interesting case which occurred in Paris to M. Piedagnel, and we shall now avert briefly to one or two others that have since been recorded.

In February of the present year, an infant three days old, was brought to M. Dupuytren at the Hotel Dieu, with the anus well formed, but opening into a culde-sac, which admitted the extremity

---

*Journal Hebdomadaire, No. 23.

of the little finger. The cul-de-sac appeared to be in contact at its apex with the rectum dilated by meconium, and pressure on hypogastrium rendered this sensation communicated to the finger, still more distinct. The accoucheur had made some unsuccessful attempts to open the intestine with a lancet. The belly was tense, tympanitic, and painful—there was frequent vomiting—and, under these alarming circumstances, M. Dupuytren was afraid to adopt the method of Durat, and establish an artificial anus in the left groin. Instead of this procedure M. D. introduced a trocar in the natural direction of the rectum, but only gave issue to a little gas, and the poor infant died in the course of the day.

At the same time that this case occurred another child five days old, was brought for the inspection of the same distinguished surgeon. In this there was no cul-de-sac, and the anus was only slightly marked—there had been some vomiting—belly slightly tense and painful. In this, as in the former instance, a lancet had been introduced without success. M. Dupuytren wished to open into the descending colon in the left groin, but the parents refused their consent. A puncture was made with a trocar in the usual situation of the rectum, but nothing was discharged, and the infant was consigned to those who had the care of it.

The foregoing are melancholy instances of the fatal effects of imperforate rectum, and we turn with pleasure to one of a more pleasing cast, recorded by Mr. Miller in the January number of the Edinburgh Journal. We make no apology for noticing it shortly in this place, as it gives an additional interest to the subject.

In 1821, Mr. Miller attended Mrs.—— in her confinement, and assisted to bring into the world a male infant, who at first was supposed to be perfectly formed, but was soon discovered to want the natural outlet of the intestines. No trace of an anus existed, but the meconium was passed by the urethra, shewing that the rectum opened into the bladder. Mr. Miller made an incision with the scalpel in the situation of the anus, an inch and upwards in length and very deep. He then plunged a trocar in the supposed direction of the gut, and fortunately for the child, and to its great relief, meconium issued through the canula at the second attempt. When the canula was removed, pieces of sponge-tent were introduced, but they could not be borne for any time, and injections of warm gruel were employed.—In spite of every care, however, the aperture narrowed so much during cicatrixation, that it was necessary to enlarge it ten times by a histoury in the course of eight months. The child grew, but with its growth contracted an unfortunate penchant for coal-cinders, which he constantly eat, and which, almost as constantly stuck in the passage, and required frequent operations to remove them. In one of these, the bladder was wounded, and an urinary fistula in the rectum was the consequence. He possessed the power over the sphincter ani, but required the frequent use of laxatives and glysters; in administering which about three years ago the mo-

ther perceived that some substance opposed the introduction of the pipe. Little however, was said about it, till at length the obstruction of the bowels was complete, and Mr. Miller on examination found a calculous concretion of very large size, blocking up the passage, and felt with a probe through the orifice of the anus.

"As the anus would only admit a goose quill, I enlarged it sufficiently to allow of a full examination with my finger, when finding the stone almost to fill the hollow of the sacrum, it was useless to think of extracting it entire, as I felt satisfied that the bones alone would absolutely frustrate every such attempt. Drilling it to pieces by boring in different directions, at once struck me as the only method of proceeding, and I unwillingly left the little sufferer for another day, that I might provide the appropriate instruments. Having procured, from an ingenious mechanic, a drilling apparatus to be wrought with a bow and string, (resembling a common hand-drill) I had a few drill-bits formed of a conical shape and of various sizes, to make a bore of from 1-4th to 5-8ths of an inch in diameter. The greatest difficulty appeared to be the properly fixing the stone when in the act of drilling. The impossibility of introducing the usual forceps to grasp such a stone, suggested to me the propriety of having a pair constructed on purpose, with separate blades, which might be fixed with a screw when applied; and such a pair being promptly prepared by Mr. Marshall, cutler, and having obtained the valuable assistance of my friend, Mr. James Miller, surgeon at Perth, I enlarged the anus in the direction of the sacrum as far as the coccyx would allow, and in the direction of the pubes, as far as the safety of the urethra would permit. The separate blades of the forceps were now cautiously introduced, and secured by turning the screw. I then applied the drilling apparatus, while my friend, Mr. Miller, held the stone firmly at the orifice betwixt the blades of the forceps, using every precaution to avoid injury. The drills were steadily and perseveringly applied, first of the small and then of the larger size, until considerable openings were made in the stone in various directions. A pair of strong polypus forceps was now thrust into the openings, and the blades being forcibly separated by extending the handles, the calculus gave way, and was separated into three pieces, each of which had in its turn to be drilled and broken in the same manner before it could be extracted. The whole operation occupied not less than two hours and three-quarters; and it was truly surprising to see with how much fortitude the little fellow bore such protracted suffering."

No bad symptoms of any kind followed. The patient had perfect power over the sphincter ani—and Mr. Miller believes that, under the use of the elastic gum catheter, the vesico-rectal fistula will heal. The calculus was at least the size of a turkey's egg, but the *practical* portion of the case being what we want, we need not stop to describe its chemical composition. The proceeding adopted does much credit to Mr. Miller's ingenuity, and may serve as a precedent in a

similar case. It is obvious that the *lithontripteur* of M. Civiale, or still more the improvement upon it carried into effect by Dr. Frecchioli, of Florence, and described in a recent number of this Journal, would be infinately preferable to a comparatively clumsey and unhandy complication of instruments.—*Med. Chir. Review.*

---

24. *Supposed Hernia of the Lung, in consequence of Tight Stays.**—A young woman, 18 years of age, of good constitution, and who had menstruated regularly, presented herself to M. Breschet with a tumour in the right side of the neck. It rose from behind the clavicle to as high as the level of the thyroid cartilage; was broader at its base than at its apex; was of variable size, but at its maximum about the dimensions of the fist; on compression, felt elastic and soft; disappeared entirely if the pressure was made from above downwards and inwards, but again returned on withdrawing the pressure, especially if the stays were laced at the time; was perfectly indolent, and presented no pulsation. On applying the stethoscope to the tumour, the respiratory murmur was distinctly heard, and no doubt remained, from this and the preceding symptoms, that the enlargement was produced by the summit of the lung protruded from the cavity of the chest; in other words, by a hernia of that organ. The disease was produced by the habit in which the young woman, like most other females of her age, had indulged, of wearing the stays exceedingly tight laced. When she did this she always experienced a difficulty of respiration, and the volume of the tumour increased. M. Breschet directed this patient to leave off her stays, and proposed to apply compression to the surface of the hernia.—*Med. Chir. Review.*

II Analytical.

25. *Treatment of Fractures of the Thigh Bone.*—In the Am. Jour. for Aug. 1829, Dr. Daniell of Savannah, has added one more to the numerous publications on this subject. His fundamental proposition is to effect extension by means of a weight and cord passing over a pully from the foot. We shall transcribe that part of his short paper which describes his method.

With the assistance of my friend Dr. Richardson, I have recently treated a case of oblique fracture of the thigh bone after the following manner:—A piece of poplar plank, long enough to extend from just below the buttock to eighteen inches beyond the foot was made on the surface slightly concave to receive the thigh—the upper end was cut into a semilunar form to fit it the better to the buttock, and made six inches wide—the lower end was four inches wide. On each side of the lower end was attached a piece of board three in-

*Clinique, No. 5. Tome 4.

ches high, extending up to the knee, with a gradually reduced height. A piece of board five inches high, was then fitted in the lower end, at a right angle with the lower board. In the middle of the upper edge of this piece was placed a small wooden roller, with a cancave edge, which was retained by a wire axis. The lower end of this splint, which projected beyond the foot of the bed, was secured by passing a screw through the bottom piece into the foot-board of the bed. The fractured limb was then placed in this splint. The many-tailed bandage was applied over the fractured portion, (the bones having first been placed in apposition,) over which at equal distances a part and round the limb, four thin wooden splints, six inches long, were placed and secured by muslin strips. A bag of dried moss was then applied on each side of the thigh, and secured by tapes passing under the board supporting the thigh, and over the limb. A silk handkerchief was then passed around the ankle, and tied at the bottom of the foot. To this projecting portion of the handkerchief was fastened a small flaxen cord, and that passing over the roller placed in the end of the case, supported a small weight. A muslin bandage was passed around the chest to which bandages were fastened for the purpose of fixing the body to the head-board to prevent its being drawn down. This was however soon found to be superfluous, as the weight of the body was quite sufficient for the purpose of resistence to the extending power, and was consequently discontinued. The dressings were renewed once or twice a week, according to circumstances, and the bones united readily, and without any shortening of the limb.

That portion of our patient's mattrass which supported the breech was made removeable, by which arrangement the pan could be used without inconvenience.

Whenever any shortening of the fractured limb was observed, the leg was gently raised and extended to the proper distance, where it was retained by the weight attached to the cord. And here I will observe, that the cord and weight are rather designed for retaining the limb properly extended than for extending it. The latter it is known is readily performed. The importance as well as the difficulty of keeping up that extension, has been felt by every surgeon who has had a fractured thigh to treat. I flatter myself that the above mode of making and maintaining the extension, will be found an improvement. It has certainly been such in my hands.—pp. 331-2.

Dr. Daniell thinks that in general, a weight of two pounds will be sufficient, which may be the case, after the muscles have become fatigued, and ceased to contract with energy, but would we suppose be too little in the beginning.

In the conclusion of his paper, Dr. D. enters a protest against placing a fractured thigh in complicated dressings,

immediately after the accident. We have already in a former number expressed ourselves against this practice, and are happy to find that others entertain the same opinion.

26. *Small pox in Pittsburgh and its vicinity.*—Dr. Callaghan (Amer. Jour,) has published a short account of the small pox, which prevailed in the western parts of Pennsylvania in the winter of 1828–9. About 60 persons died of the disease in the city of Pittsburgh. The disease seems to have been mild and distinct—requiring the usual antiphlogistic measures carried to moderate degree.

A goodly number of persons reported to have been vaccinated took the disease, insomuch that the faith of the community in the preventive powers of vaccination, is considerably shaken. One young man came under my observation, who had been vaccinated ten or twelve years before by a most respectable practitioner in Philadelphia; he had a distinct and well-defined mark of a vaccine vesicle on the arm, yet he had the natural small-pox in the most regular manner, though mild.

Here there were a numerous family of young persons, none of whom caught the disease. They had all been formerly vaccinated; some six, some nine, some twelve, and some twenty years before. A boy who had not been vaccinated, caught the disease; during his convalescence, and throughout the greater part of his illness, a child, about three or four years of age, who had been formerly vaccinated, was much about him—she escaped the disease.

In a family who occupied a house, in the cellar of which some persons of colour resided, ill of the small-pox, three of the children were liable to the contagion; they were vaccinated and escaped.–302.

The disease was said to have been introduced by a negro from Canada, but Dr. L. insists that it depended on the state of the atmosphere. We must say, however, that in whatever mode this malady was at first produced, nothing seems to us better ascertained than that it is propagated by contagion.

27. *Tubercular Consumption. Injurious effects of the antiphlogistic treatment.*—We have read with satisfaction, in the last number of the N. A. Med. and Surg. Jour. a paper by Dr. Parrish of Philadelphia, on the errors of the profession in the treatment of tubercular consumption. In the opinion of this

able and experienced physician, it is a serious mistake to regard this malady as one of the phlegmasiæ, and treat it with bloodletting and other antiphlogistics. But let him speak for himself:

I do not believe that the condition of the lungs in tuberculous phthisis is at all analogous to ordinary inflammation, or that it is to be treated upon similar principles. The diseased action is peculiar, and requires peculiar modes of cure. It is true that genuine inflammation may, and often does, supervene upon the proper phthisical complaint, and tends to aggravate it. It is no uncommon circumstance for consumptive patients to be attacked with catarrh, and with acute pain in some part of the thorax. In this case, moderate depletion, either general or local, together with blisters to the breast, and other antiphlogistic measures, may be employed with advantage: but they should even here be used with caution, for fear of producing a degree of debility which the system in its diseased condition may not be able to surmount. But merely with the view of curing the tuberculous affection, bleeding should never be used: without diminishing the disorded action, it tends to enfeeble those vital energies which constitute the only defence against the progress of the invader.—278.

The object which the Doctor has in view, is to prevent the officious and exhausting interference of art in this incurable malady, rather than to point out new methods of treatment; he proceeds, however, to add his testimony to that of Sydenham, Rush and many other distinguished physicians, in favour of exercise. On this subject he holds the following language:

But, though the antiphlogistic course of treatment, and the use of powerful medicines, are calculated rather to co-operate with the disease of the lungs in reducing the system of the consumptive patient, than to relieve or eradicate the complaint, yet we are not therefore to surrender all hope, and yield up the sufferer an unresisting victim. On the contrary much may be done by exertion on the part of the individual affected in controlling the disease; and instances are not wanting in which it would seem to have been entirely conquered.

Vigorous exercise, and free exposure to the air, are by far the most efficient remedies in pulmonary consumption. It is not, however, that kind of exercise usually prescribed for invalids,—an occasional walk or ride in pleasant weather, with strict confinement in the intervals,—from which much good is to be expected. Daily and long continued riding on horseback, or in carriages over rough roads, is, perhaps, the best mode of exercise; but where this cannot be

commanded, unremitting exertion of almost any kind in the open air, amounting even to labour, will be found highly beneficial. Nor should the weather be scrupulously studied. Though I would not advise a consumptive patient to expose himself recklessly to the severest inclemencies of the weather, I would nevertheless warn him against allowing the dread of taking cold to confine him on every occasion when the temperature may be low or the skies overcast.

I may be told that the patient is often too feeble to be able to bear exertion, but, except in the last stage, where every remedy must prove unavailing, I believe there are few who cannot use exercise without doors; and it sometimes happens, that they who are exceedingly debilitated find, upon making the trial, that their strength is increased by the effort, and that the more they exert themselves, the better able they are to support the exertion.

It is said by those who oppose this kind of treatment, that the lungs are in a state of inflammation, and therefore require rest. But admitting for a moment that the tubercles in pulmonary consumption are the result of ordinary inflammatory action of a chronic or subacute character,—an opinion, however, which I have already disclaimed,—yet the argument will not hold in the present case; for, from their very organization, the lungs cannot be at rest. From the moment we begin to breathe to the latest period of life, they are necessarily in continual motion. We cannot confine them as we can a diseased joint; and in attempting to restrain their motions by keeping the body at rest, without gaining our object, we generate a degree of irritability of system, which enables the local affection to operate upon the general health with a vast increase of deleterious effect.—279.

Dr. P. then goes on to narrate a number of cases in which the substitution of exercise for a course of depletion and polypharmacy, was attended with the happy effect of mitigating the sufferings and prolonging the life of the patient. How many of them are, in fact, examples of tubercular phthisis, we have no means of judging, as he has not given those symptoms which are distinctive of that disease from chronic bronchitis, and chronic pneumony with hepatization.

Our own observations coincide in the main, with those of our highly judicious friend, and hence we have been induced to present to our young and *energetic* readers, the results of his ample experience.

In a future essay he intends to give the fruits of his experience on the palliative pharmaceutic treatment of the same disease. For ourselves, we take this opportunity to say

that on the whole we have found cupping, digitalis, colchicum, minute antimonials and opiates, of more efficacy in this respect than all other means. The great object seems to us to be, to moderate the wearing and ceaseless action of the heart, for to remove the tubercular irritation of the lungs which arouses their associate organ into preternatural contraction, is beyond the reach of the art, in its present imperfect state. Now, of the various means of fulfilling the indication here stated, we know of none so potent as the remedies just named. To be effective or even safe, they must, however, be administered with skill and caution. They may be given so sparingly as to do no good, or so freely as greatly to debilitate, if not destroy the patient. In their management, so as to moderate the frequency of the pulse, without impairing the powers of the system, consists the practical *tact* of the physician. If the *energy* of the circulation be great, the antimonial may be used more freely; if small, opium or one of the salts of morphia, should predominate.

In many cases we have seen the following formula (designed for our younger readers) produce the happiest effects:

℞. Thick mucilage of Gum Arabic, recently prepared, ℥iv.
Saturated tincture of Digitalis, or
Wine of Colchicum, ℥j.
Tartarized Antimony, Gr. j.
Sulphate of Morphia, Gr. j.
Mix.

A table spoonful, or half an ounce, may be taken from two to four times in the 24 hours.

In cases of great debility, the following palliative will be found to afford relief, and may also be recommended to the junior members of the profession:

℞. Gum. Arab. mucil. ℥iv.
Acid. Sulph. Aromat. ℥ss.
Sulph Quin. Gr. viij.
Sulph. Morph. Gr. j.
Misce.

Against a salivation, prostrating doses of tartar emetic, extensive blistering, issues, and long applied tartar plasters, not

less than copious blood letting, we feel it our duty to record an unqualified protest.

---

28. *Cynanche Trachealis.*—Assistant professor Jackson of the University of Pennsylvania, in the Am. Jour. for Aug. 1829, has published the histories of three cases of croup, two of which proved fatal, and gave rise to autopsic examinations. The ingenious and indefatigable author concludes his paper in the subsequent language:

The preceding cases justify the following conclusions:—

1st. That inflammation of the tonsils is a frequent precursor to croup in children; and that it ought consequently always, in them, be attentively watched, and should be treated very actively by the means best adapted to reduce imflammation.

2d. That the membranous exudation may commence in the lower part of the trachea and the bronchia, extending upwards, and does not invariably arise in the fauces or larynx, and proceed downwards.

3d. That the most prompt and decisive remedy for sanguine inflammation—that is, sanguineous depletion—is the only certain remedy, and should be resorted to in the first periods of the disease, so as to precede the membranous exudation.

4th. That the membranous exudation having been once produced to any extent, little expectation of a recovery is to be entertained. When this result does occur, it is to be regarded as fortuitous, depending on some extraordinary circumstance, and which cannot be calculated as a probable event.

5th. That when the membranous exudation has been thrown out in the larynx, trachea, and bronchia, the application of muriatic acid to the fauces, so highly extolled by Bretonneau, and of nitrate of sil ver, recommended by Dr. Mackenzie, from the local and limited impression they must necessarily make, can promise no beneficial operation—their influence cannot be extended to the surfaces from which the exudation takes place. This practice can be of utility only in rare cases, where the difficulty arises from an obstruction limited to the glottis and fauces.

6th. That laryngotomy, or bronchotomy, is a useless operation, when the membranous exudation has actually occurred, and extends as it mostly does, to the trachea and bronchia, or when the inflammatory irritation of the respiratory mucous membrane is not subdued, and a free secretion from it is produced. The impossibility of coughing after the operation, prevents expectoration, the fluids accumulate in the trachea, bronchia, and bronchial ramifications in the lung, causing finally, suffocation. The only case in which the ope-

ration promises success, is an obstruction confined entirely to the glottis, without disease prevailing to any extent in the respiratory mucous membrane.—369.

We take this opportunity to remark, that our experienced and judicious friend professor Richardson, of the obstetrical chair in Transylvania University, has long taught in his lectures, that in severe cases of croup, the inflammation extends throughout the ramifications of the bronchia, and is by no means confined to the larynx.

29. *Entropion cured by pulling down the eyelid.*—Dr. Jackson of Northumberland, has published in the Am. Jour. a case of entropion of one of the lower eyelids, consequent on long continued, miasmatic ophthalmia, which was suddenly cured by strongly pulling down the lid, in the manner proposed by Demours. The following paragraphs will sufficiently set forth the condition of the eye and the method which he employed:—

One eye was now entirely well, but the other was found to be affected with entropion of the lower palpebra. The whole tarsus was turned under the eyeball, so as to present a smooth rounded contour, as represented in M. Demours' eighteenth plate. We made several attempts to pull down the lid and extricate the tarsus, but so violent was the action of the muscles that we utterly failed; therefore, as the eye was constantly improving we desisted from any further attempt, with the hope that the new cilia had not grown out so as to cause irritation. The swelling diminished every day under the use of blisters; the globe was not inflamed, but some matter filled the eye in the morning; every blister most evidently lessened the sensibility to light.

Three weeks ago we made a very vigorous attempt, with Dr. Rodrigue's help to pull out the tarsus, but succeeded only so far as to discover that the cilia had grown to nearly their full length and full number, and that the eyeball, rolling upon them, held the tarsus firmly under. Here was at once an end to all our dreams of a cure; for on such a restive child, now rendered infinitely impatient of every thing, we considered an operation as impracticable, and that the cilia would irritate the eye afresh, and prove a cause of insuperable inflammation. Wishing however to explore the state of things yet further, we made another violent attempt to pull out the tarsus, and fortunately the little sufferer did not resist, as she had always done before, with the utmost power of the orbicularis; so far from it, that, as it

were by inspiration, she seized the palbebra with all her fingers, while mine were employed lower down, and she turned the tarsus completely out so that the cilia spread over the front of the eye. It appeared to have no tendeacy to relapse; I saw it resume its natural situation and figure, nor could I compare the operation to any thing more appropriately, than to the reduction of a dislocated bone. The eye and palpebra assumed their natural appearance at once, and have ever since continued entirely well. The cilia stood erect at first, and spread over the eye, but they gradually assumed their proper direction.

This case was clearly not produced by ulceration, and consequent contraction of the inside of the palpebra; we should rather presume that the lid had been so distorted by tumefaction, that the tarsus was reverted under the eye-ball, and afterwards firmly held there by the pressure and rolling of the globe on the new cilia. This accords with the observations of M. Demours, that "the entropion of the inferior palpebra is most frequently the consequence of an œdema of its tissues, and particularly of a relaxation of that part of the skin which covers it."*

*Tome premier, p. 105, De la Trichaise.

32. *Chloride of Sodium in Cancer.*—Mr. Buchanan, of Hull, (England,) and Mr. Fielding, of the same place, have published cases of Cancer, cured by the internal and external use of the Chloride of Sodium. The Boston Med. and Sur. Journal contains an account of one of these cases, drawn up by the former of those gentlemen. The patient was a female, aged 53, and the disease was seated in the right mamma. After it had existed for several years, and the ulcer was two inches in diameter, with darting pains in the breast, thorax and axilla, it was cured by the application of the tincture of iodine; but the parts remained in a state of considerable induration. In less than a year the whole of the indurated substance was thrown off, leaving a foul, fœtid ulcer, larger than before, with a sanious, bloody, and most offensive discharge, and all her former pains returned, with increased violence. In this state of things recourse was had to the chloride, according to the following formula:—

℞. Liq. Chlor. Sod. ℥vj.
Aq. Distillat. ℥viij. M. ft. Lotio.

"I dipped," says he, "a pledget of lint into this lotion, and applied

it to the diseased portion of the breast, with directions to keep the parts constantly moist with it: and also to take two tablespoonsful of the solution three times a day.

"The following day the discharge was changed to the color and consistence of cream, totally divested of its fetid disagreeable smell. The ulcer healed rapidly: the whole of it was soon covered with healthy skin; forming, however, a considerable depression, occasioned by the loss of substance, as if part of the mamma had been dug out. The cure was completed by the latter part of June, 1829, being little more than ten or twelve days from the time of the first application of the solution of the chloride, and with only six bottles of the above, which were used indiscriminately as mixture and lotion. The patient was employed in the harvest following, and as she expressed it, "wrought in better health and spirits than she had done for these last twenty years."

---

31. *Fœtal bones coloured with Madder, administered to a sow.*— Of late years, the number of authentic facts relative to the absorption of active substances into the circulation, has increased to such an extent, as to redeem our predecessors of the *humoral* school, from much of the ridicule which was at one time cast upon them. Many years ago, Dr. Mussey, now a professor in Dartmouth college, performed and published in Barton's Med. and Phys. Journal, or some other periodical, a series of experiments, going to prove that madder, in solution, is absorbed through the skin. Very lately, [*Am. Jour.*] he has administered the same substance to sows, in a state of *utero-gestation*, and found, that not only their urine, and the serum of their blood, contained the medicine; but also the *liquor amnii*, and the fœtal bones, even to the teeth.

---

32. *Rhus Glabrum, a remedy for Ptyalism.* Dr. Fahnestock, Am. Jour. for Nov. 1829, has recommended the bark of this shrub, the common sumach of our woods and fields, as an excellent remedy for salivation and mercurial ulceration of the mouth.

"An infusion, says he, of the inner bark of the root of the Rhus glabrum is a very mild mucilaginous refrigerant, and moderately astringent, very cooling and soothing to the irritated surface of the mouth and throat, and can be applied in any stage of disease and at any age. It acts by allaying irritation and obstructing excitement, sheathing the delicate surfaces, and healing abrasions."

Dr. F. has given the notes of some severe cases of mercurial disease in the mouth, which yielded, without delay, to this infusion.

THE PEOPLE'S DOCTORS. A REVIEW.

[Concluded from page 420.]

"AURUM, *Gold.*

But the virtues of the *rex metallorum*, although of the same kind, are incomparably greater than those of silver:

"It is Cordial, mundyfying, strengthening the Heart, chears the Spirits, strengthens the natural balsam of Blood, and therefore, is given successfully in all Diseases, wherein the Heat, Life, Vivacity, and Strength of both Body and Spirits need repairing; it is Sudorifick, cleanses the Bloud, discusses Humors, and resists the Poison of Mercury, and other mineral Fumes.

"And as its Tincture, given in Wine to ten or twenty drops, does revive those that are at Deaths-door; so also it is very good against the falling-Sickness, Apoplexy, Palsy, Vertigo, Megrim, Lethargy, and other Diseases of the Head, and destroys the Root and Seminaries of all malignant and poisonous Diseases: It resists Putrefaction and is prevalent against the Plague, and all sorts of pestilential Diseases."

We recommend the king of metals to the afflicted, but cannot speak from experience, as we never yet had enough to make the trial. Even the steam-doctors themselves will scarcely gainsay this advisement; and we think it extremely probable, that however reluctant they may be to *give*, they will not often show many qualms about *taking* the precious metals.

"MARGARITA, *Pearl.*

Many of our readers will recollect, that a few years ago, when Prof. Rafinesque condescended to sojourn in the Backwoods, he proposed to our capitalists, to undertake the growing of *pearls*; but their money was employed at that time in growing *hogs;* and, as they did not think it right to place *pearls* before *swine*, they declined the Professor's proposal; and he departed for Philadelphia, as a better theatre for his scientific enterprises. At that time, the wisest of us did not fully understand what the professor would be at; but it is clear to us now, that being a great antiquary, he had read the following notice, in *doctor* Salmon; and would have cured his patients with *pearls* instead of *Pulmel*, if his learning had been properly appreciated by our monied men.

"Authors say Pearls are cold and dry in the second degree, but I

believe them to be rather temperate in respect of those Qualities; they prevail against Fainting, Swooning, Palpitation of the heart, and all other cardiac Passions, and cure Heart burnings in a moment by absorbing the Acid Humor; they chear the Heart, revive the Spirits, comfort Nature, and restore Strength lost; they stop all sorts of Fluxes, as Diarrheas, Lienteries, and Dysenterias, as also the Hepatick Flux. *Aldrovandus* saith, the levigated Pouder is good to be put into *Collyriums* for the Eyes, for that it takes away the sharpness of the Humor, takes away Clouds, Films, and Dimness, cleanses them from Filth, and strengthens the Nerves by which moisture flows into them. Taken inwardly *ad* ʒj. it removes Melancholy, and heavy pressures of the Spirits, defends against pestilent Diseases. *Mylius* saith, it stops the toothache and cleanseth the Teeth, and is mixed with other Cordial Remedies; It is also prevalent aginst Fevers and all preternatural heats; put upon sharp corroding eating Ulcers, and where the Nerves are bare, it does much good, and gives present ease in the pains thereof. They are by all accounted an excellent Cordial, by which the oppressed Balsam of Life, and decayed strength are re-created and fortified, as *Paracelsus* affirms."

Now here an important question arises, and will perhaps never be answered. It is, whether *doctor* Rafinesque would not have killed fewer people, (oysters excepted) if he had engaged in the practice with pearls, than will be destroyed by his 17 preparations of Pulmel.

But we must hasten into other compartments of the 'Druggist's Shop.'

We have already intimated, that *doctor* Thomson has found RED CLOVER a *cure* for *Cancers*. The following is his formula:—

"CANCER PLASTER.

"Take the heads of red clover and fill a brass kettle, and boil them in water for one hour; then take them out and fill the kettle again with fresh ones and boil them as before in the same liquor. Strain it off and press the heads to get out all the juice; then simmer it over a slow fire till it is about the consistence of tar, when it will be fit for use. Be careful not to let it burn. When used it should be spread on a piece of bladder, split and made soft. It is good to CURE cancers, sore lips, and old sore:"

In justice to *doctor* Salmon, and to compare the great and 'gifted' men of different centuries, we shall transcribe a part of *his* remarks on this rare and powerful medicine:—

"It is temperate, drying, astringent and strengthening; eases fretting pains of the bowels and brings forth sharp and slimy humours; is an excellent vulnerary whether inwardly or outwardly used; and mixt with Honey and dropt into the Eyes, it eases their pain and inflammation, and takes away the Pinn and Web; and being drunk it cures the bitings of Serpents or other venomous Beasts, heals green Wounds and gives ease in the Gout."

It was doubtless when his genius was pampered by 'living in clover,' seasoned with 'cayenne' and 'brandy,' that orator Robinson burst forth into the following ejaculation, which might be compared to Dean Swift's 'Pious Meditations on a broomstick'—

"If the immense riches of medical virtue, inherent in the plants and flowers of the field, were collected in one volume, it would realize the aspiring hope of the great and good Dr. RUSH, the perfect cure of all the maladies of the human race. And the rays of human thought are converging on this sublime, and grand, and awful elevation—the perfection of the healing art; and will continue to concentrate their energies until the full blaze of glorious triumph shall burst upon the world."

We have quoted *doctor* Thomson's opinion of the virtue of *chicken* broth, but he seems to be ignorant of the still greater efficacy of *turkey-buzzard* broth. The following are the words of *doctor* Salmon:

"*The Flesh* is seldom eaten, but the Broth thereof, and the substance thereof eaten, are said to cure the Leprosie, Elephantiasis, Swellings, Tumors, King's-Evil, Botches, Boils, Scabs, malignant Herpes, Tettars, or Ring-worms, Gout, Epilepsies, Convulsions, Palsies, Morphew, Elephantiasis, Struma, Spitting of Blood, and *helps dimness of sight.*"

In reference to the last important object, we would respectfully advise the people to try this broth for awhile, before they resort to our Eye Infirmaries, where the regular doctors may poison them with 'marcury' and 'bleeding.' If it should fail, they might have recourse to the following recipe, of which *doctor* Salmon seems to have a still higher opinion:

"*Ashes of a Cat's Head* ℥j. *white vitriol in fine Pouder*, Saccharum Saturni *ana* ℈j. *mix them for a Pouder;* or mix them with Honey for a Balsam, blown into the Eyes, or annointed thrice aday; it cures Blindness, and most Diseases of the Eyes, as the Pin and Web, Pearls, Clouds, Films, &c."

"AN ELIXER UNIVERSALL; *Not particular for any Distemper.*

"Rex Metallorum (Gold) ℥ss.
Pouder of a Lyons Heart ℥iv.
Filings of a Unicorn's Horn ℥ss.
Ashes of the whole Chameleon ℥iss.
Bark of the Witch-Hazle, two handfuls.
Earth Worms (Lumbrici) a score.
Dried Man's Brain ℥v.
Bruisewort (Saponaria), Egyptian Onions } Each ℔ss.

"Mix the ingredients together and digest in *my Spirits Universalis*

with a warm digestion, from the change of the Moon to the full, and pass through a fine strainer.

'This Elixer is temperately hot and moist, Digestive, Lenitive, Dissolutive, Aperative, Strengthening, and Glutinative: It opens obstructions, proves Hypnotick and Styptick, is Cardiack and may become Alexpharmick. It is not specially, great, for any one single Distemper; but of much use and benefit in most cases, wherein there is difficulty and embarrassment, or that which might be done, doth not so clearly appear manifest and open to the Eye."

We have copied nothing out of *doctor* Salmon with greater pleasure than the foregoing receipt. It is exactly what is wanted, both by the people and the doctors. As a family medicine it would be unrivalled; for being, to some extent, adapted to all diseases, it might in most cases do a certain amount of good, and Nature could finish the cure. Thus the necessity of employing a physician would often be wholly prevented; a *desideratum*, with the people, which every people's friend should labor to supply. It might, moreover, enable them to correct the injury which is done to their health by nostrums; and, thereby, afford them the pleasure of remaining still longer in the hands of quacks. To dyspepticks and hypochondriacks it would be a treasure; as they might frequently resort to it, when they feel bad and fidgetty, and don't know exactly what to be at. To the *bon vivans* and *gourmands*, it would not be of less value, for a dram of this Elixir would prepare their stomachs for the comfortable reception of the turtle soup, Welch rabbit, egg-nog, champaign, and fourth proof brandy, which 'good company' dooms them to ingurgitate.

To the people's doctors themselves, it could be made equally useful; as, in every disease, it gives *some* relief, which is all that is necessary to establish them in the confidence of the people. Indeed, we think it not unlikely, that some 'natural' will soon take out a patent for this receipt, and convince the people, that it is not merely a palliative, as *doctor* Salmon has modestly set forth, but an infallible cure for all distempers—to which end, judging from the past, it would not be difficult to get a large number of certificates, either attested before a justice of the peace, or certified on honor.

Even to the regular Doctors it would not be without its value, as it would come to their aid on many trying occasions. They should, indeed, never be without it in their pockets, for they know not at what moment a case may offer, which they have forgotten how to treat, or never knew; when it might be made a sort of 'tub to the whale,' for the patient and his

friends, until they could go home and read. It would be equally adapted to the cases which they have not time to inquire into, without abridging their hours of idleness and gossip; as, also, to all such as are obscure and undefinable; about which they must never betray any doubts to the people, if they would retain the people's confidence, for the people tolerate no doubters in the practice of medicine: They wisely suppose, that their 'life assurance' is strong, in proportion to the assurance of the doctor; and where the latter is wanting, are apt to think the former defective. Finally, there are several diseases, which generally prove fatal, (except when treated by *doctor* Thompson,) and in these it might be well to try this Elixer of all virtues, as the least troublesome method of investigation and discovery.

Since we are engaged, for the benefit of the people, in extracts from this great repository of one of the people's *doctors*, we shall copy the following, which we would advise our Backwood's friends, who live where foxes are plenty, to try before they send to Philadelphia for *doctor* Rafinesque's *pulmel*, for the cure of consumptions:

"An Extract or Electuary of *Fox Lungs* is reported to be good against Coughs, Colds, Asthma's, all manner of Obstructions of the Lungs, shortness of Breath, difficulty of Breathing, &c. And for these Purposes the Lungs of a *Hart*, *Buck*, or *Doe*, are yet preferable; now if the gross Body of the Lungs will do this, what may be supposed the *Volatile Salt* will do? Truely, it will do that in *three minutes*, which the other will not so well do in 10 *days;* it will do all the aforementioned things, and cure an *exquisite Pleurisie* upon the Spot, this I speak by experience.

"I must intreat the excuse and pardon of the Galenick Physician, and many others of the learned World for my being so zealous for the use of Volatile Animal Salts, since I have had a large practical Experience of their admirable, yea, their stupendious effects, for the best part of thirty years last past; I speak not from the Opinions or Assertions of other Men, I only assert naked Truths from a continued Series of Experiences for near thirty Years together."

The close of this important annunciation, recals to our minds the following sentences in *doctor* Thomson:—

"Long has a general medicine been sought for, and I am confident I have found such as are universally applicable in all cases of disease, and which may be used with safety and success, in the hands of the people.

"After thirty years study and repeated successful trials of the medicinal vegetables of our country, in all the diseases incident to our climate; I can, with well grounded assurance, recommend my system of practice and medicines to the public, as salutary and efficacious."

These two great men seem indeed to have innumerable points of resemblance. *Doctor* Salmon, however, like *doctor* Rafinesque, and unlike *doctor* Thomson, was a man of learning, and gave a much wider scope to his inquiries. Thus in the following article he displays an extent of research, and philosophical acuteness, which *doctor* Swaim, and all the *steam-doctors*, may envy, but can never hope to reach:—

CRANIUM HUMANUM, *Man's Skull.*

"It is called in Hebrew, *Gulgoleth Meta:* in Greek, *Kranion Anthropou:* in Latin, *Cranium humanum:* in English, *Man's Skull.*

Whether it ought to be the *Skull* of a *Man* dying a violent death, or a Natural, is not much material; because the cause of a Natural death, never proceeds from a decay or hurt of the Principles of which the Bones are composed, but rather from a decay of the fleshy Organs and Viscera, and a hurt of the Spirits, Vital, and Animal.

"Some Authors are of Opinion, that it ought to be a *Skull* never buried, and the fresher the *Skull* the better; but this is a great doubt, since my own experience has confirmed, that the simple Pouder, made of a *Skull* many years buried, has done more in the cure of Epilepsies, than all the Elaborate Chymical Preparations, made from those which have been fresh and green.

We have oftentimes used *Skulls* unburied without success, whereas we have often used the other with profit to the Sick. And in a certain Patient, we had given more than 30 Doses of *Skulls* not buried, without any success at all; whereas upon the exhibition of 6 or 7 Doses of that which had been long buried, the same Patient, miraculously recovered, and was perfectly restored, so as the Disease never returned any more; and the same thing we have since several times proved in several other Epilepticks to our great satisfaction.

The reason of this thing is almost obvious; for in a fresh *Skull*, the Particles are not so maturated or ripened, so as to set the Volatile Parts at liberty to operate, as they are in a *Skull* long buried, the which may easily be proved in distillation, for that the Volatile Parts, are nothing near so easie to ascend in the former, as they are in the latter.

Moreover the latter is more imbibed, impregnated, or satiated with the Volatile Parts of the Flesh on the outside, and substance of the Brain within, all which putrefying about the *Skull*, and drying away, the substance of the *Skull* becomes meliorated, not only with its own proper Spirits and Salt; but is also much better digested, by being, as it were, imbibed or immersed in the Humidities and Volatile Particles of the Parts adjacent, which putrefying about it, and leaving their pure Parts at liberty, are probably attracted and drawn into the substance of the Bones of the *Skull.*

I offer this, as something of Reason, joined with Experience, yet not willing to impose upon any Man's credulity, farther than the power of truth, and matter of Fact shall prevail.

From *Man's Skull* several Preprarations are made, as. 1. A Levigated Pouder. 2. A Magistery. 3. The *Galreda Paracelsi.* 4. A Tincture with Spirits of Wine, Juniper or Sage. 5. A Tincture made with our *Spiritus Universalis.* 6. The Spirit, Oil, and Volatile Salt. 7. The fixed Salt. 8. The Essential Powers. 9. The *Protestates Nitratæ*; of all which in order."

These nine preparations of skull seem to have suggested to *doctor* Rafinesque his twelve preparations of pulmel.

Indeed the further we look into the 'Druggist's Shop Opened' by the great people's *doctor* of the 17th century, the more we are convinced, that it is the magazine from which the people's *doctors*, of the present age, have drawn most of their learning. It contains some things, to be sure, which are not quite current at this time, such as witchcraft and spells; but these have still their advocates among us, and at the period when *doctor* Salmon lived, the majority of the people believed in their existence. On the whole, the 'Druggist's Shop Opened' of 1693, approached altogether as closely to the books of the profession at that time, as the 'Botanical Family Physician' of 1828, does the medical writings of the present day.

In asserting the claim, of *doctor* Salmon to the paternity, of much which the people's doctors are now imposing on them as *new*, we perform, as reviewers, but an act of common justice; the more loudly called for, as *doctor* Salmon had no orator Henley, or orator Robinson, to trumpet forth his fame. He seems, however, not to have been altogether incapable of indicting an encomiastic paragraph on his own labours, which we are compelled to say is quite as applicable to them, as are the inflated periods of the *steam orator*, to the labors of the *steam-doctor*. The following is the closing sentence of his book, and will finish our extended notice of it:

"Thus at length with much labour and pains, I have gone through and performed this so exceeding needful, so much desired, so long waited for work, wholly new in it its kind, and contrived in a practical method for the publick good, through the help of him, who works and none can let, who makes a way in the Sea, and a path in the mighty Waters, leading the Blind by the Hand, and guiding them in Paths they have not known.

Our extracts from the 'Compleat English Physician,' will, we think, be sufficient to rescue the reign of William and Mary, from any charge of defective originality; while they serve to show, that great as may be the fooleries of *doctor* Thomson, still greater had been previously invented. They differ, however, *only* in degree. In all ages, quackery has been essentially the same—a compound of ignorance, effrontery, falsehood, and libels upon science and virtue. Every quack is, indeed, a *demagogue*; and relies, for his success, on nearly the same arts, with his political and religious, or rather *irreligious*, brethren. He is one of the *people*, and pre-eminently the guardian of the *people;* while those who spend

their lives, in acquiring the knowledge which has been handed down by the great physicians and benefactors of the world, are not *of* the *people*, but arrayed against the *people*, and bent on killing them off with rats bane, as if they were no better than so many Norway rats! Thus it is that the *people* allow themselves to be *charmed*, till they lose their senses, and crawl into the serpent's mouth. Would you arrest them, you thrust yourself between a snake and a fool—to be hissed into wonderment by the former, and brayed into silence by the latter. Happily, the injury you receive, is as little as the good you can do. But if you can do no good, why should you attempt to interpose? Or, why devote to the quack and his victims, so many pages of your Journal? This is a knotty question, and we shall leave our readers to answer it for themselves; content if the bill of fare we have served up, shall have, in any degree, relieved them from the fatigue of weightier studies.

CONTENTS OF NO. III. VOL. III.

ESSAYS AND CASES.

ART. I.—Practical Essays on Medical Education and the Medical Profession.—BY THE EDITOR. - - - 317

ART. II.—Case of cartilaginous Structure of the Cervix Uteri in a pregnant woman, requiring an incision through the Os Uteri to render delivery practicable.—BY G. COTTON, M. D. of Marietta, President of the Medical Society of Ohio. - 341

ART. III.—Some account of the efficacy of tight bandages and oil of turpentine, applied to the extremities in certain stages of Autumnal Fever.—BY WILLIAM MCCLAY AWL, M. D. of Somerset, Ohio. - - - - - 342

ART. IV.—A Case of Organic disease of the stomach, with the appearances after death.—BY SAMUEL MARTIN, M. D. Col. Reg. Chir. Lond. Soc. of Morgan county, Ohio. - - 344

ART. V.—Some account of the Symptoms and Treatment of the Dengue, as it appeared and prevailed in the southern and central parts of Ohio, in the spring of 1829.—BY DR. JOHN COOK BENNET, of McConnellsville. - - - - 347

ART. VI.—Brief notices of the Measles, which prevailed at Circleville, O. in the spring of 1829.—BY DR. JOHN COOK BENNETT. - - - - - - - 351

ART. VII.—Remarks on the Physiology of the Eye.—BY JAMES C. FINLEY, M. D. of Cincinnati. - - - 355

ART. VIII.—A case of Morbus Cœruleus, attended with infiltration of blood under the hairy scalp.—BY DR. WILLIAM M. VORIS, of West Union, Ohio. - - - - 361

ART. IX.—An Inquiry into the Pathology and Treatment of Yellow Fever, as it prevails at New Orleans at this time, August, 1829.—BY DR. LYMAN CRONKRITE. - - 367

REVIEWS AND BIBLIOGRAPHICAL NOTICES.

ART. XI.—The People's Doctors.—New Guide to Health; or Botanic Family Physician. Containing a complete system of practice upon a plan entirely new, &c.—BY SAMUEL THOMSON.

A course of fifteen Lectures on Medical Botany, denominated Thomson's new Theory of Medical practice, &c. delivered in Cincinnati, Ohio.—BY SAMUEL ROBINSON.

Cases of cures performed by the use of Swaim's Panacea.—BY WM. SWAIM.

The Compleat English Physician, or Druggist Shop Opened.—BY WILLIAM SALMON, London, 1693. pp. 1208.

The Pulmist; or Introduction to the art of curing and preventing the Consumption or chronic Phthisis. A medical essay, including a new and better distinction of its causes, kinds, remedies, diets and other peculiarities. By Professor Rafinesque, Ph. D. and Pulmist, Professor, &c. - - - 393

MISCELLANEOUS INTELLIGENCE.

I. Analectic.

1. Iodine at the Hospital of St. Louis. - - - - 421
2. Camphor vaporized, a Remedy for Chronic Gout and Rheumatism. - - - - - - - - 421
3. The use of Tartar Emetic in Large Doses recommended first in England. - - - - - 423
4. Efficacy of sponging with Cold water in Measles. - 423
5. Subcarbonate of Iron in Tetanus. - - 425
6. Cheiloplastic (operation de) operation for New Lip. - 426
7. Treatment of Fistulæ. - - - - 426
8. Recto-Vaginal Fistula. - - - 427
9. Spontaneous Combustion of both hands. - - 427
10. Debility of the Rectum. - - - - 428
11. Preservative power of Belladonna against Scarlet Fever. 429
12. Solution of Camphor. - - - 430
13. Fœtus affected with Fungous Hæmatodes. - - 431
14. Acute Watery Effusion in the Brain occurring without Inflammation. - - - - 431
15. Tartar Emetic in Large Doses. - - - 433
16. Partial Palsey cured by Strychnia locally applied. - 434
17. Inflammation of the Sinuses of the Brain. - - 435
18. On the detection of Corrosive sublimate. By M. Orfila. 436
19. New Organic Alkalies discovered in Cinchona Bark. 438
20. Ophthalmia Neonatorum. - - - 439
21. Influence of the age of the Parents on the Sex of their offspring. - - - - - 441
22. Mode of Suspending the Secretion of Milk. - 442
23. Treatment of Imperforate Rectum. - - 442
24. Supposed Hernia of the Lung, in consequence of Tight Stays. 445

II. Analytical.

25. Treatment of Fractures of the Thigh Bone. - - 445
26. Small Pox in Pittsburgh and its vicinity. - . 447
27. Tubercular Consumption. Injurious effects of the antiphlogistic treatment. - - - - - - 447
28. Cynanche Trachealis. - - - - - 451
29. Entropion cured by pulling down the eyelid. - - 452
30. Chloride of Sodium in Cancer. - - - 453
31. Fœtal bones coloured with Madder, administered to a sow. 454
32. Rhus Glabrum, a remedy for Ptyalism. - - 454